APPENDIX A

Claims 1 - 104 (Canceled)

105. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a prior vector circuit generating prior vector information in response to the frame of prior pixel image information;~~

~~a next vector circuit generating next vector information in response to the frame of next pixel image information;~~

~~a temporal interpolation circuit generating a frame of temporally interpolated information in response to the prior vector information, in response to the next vector information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information; and~~

~~a transform processor generating transformed image information in response to the frame of temporally interpolated information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information~~ storing computer instructions;

generating camera image information; and

generating temporally interpolated image information in response to the camera image information and in response to the computer instructions.

106. (Currently amended) A ~~system as set forth in claim 105, further~~ process comprising the acts of:

~~an RF communication link communicating output image information in response to the transformed image information~~ storing computer instructions;

generating infra-red image information; and

generating temporally interpolated image information in response to the infra-red image information and in response to the computer instructions.

107. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a prior vector circuit generating prior motion vector information in response to the frame of prior pixel image information;~~

a next vector circuit generating next motion vector information in response to the frame of next pixel image information; and

a spatial interpolation processor coupled to the first memory and coupled to the second memory, the spatial interpolation processor generating a frame of spatially interpolated image information in response to the prior motion vector information, in response to the next motion vector information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information storing computer instructions;

generating radar image information; and

generating temporally interpolated image information in response to the radar image information and in response to the computer instructions.

108. (Currently amended) A system as set forth in claim 107, further process comprising the acts of:

an RF communication link coupled to the spatial interpolation processor, the RF communication link communicating output image information in response to the frame of spatially interpolated image information generated by the spatial interpolation processor storing computer instructions;

generating tomographic image information; and

generating temporally interpolated image information in response to the tomographic image information and in response to the computer instructions.

109. (Previously presented) A process comprising the acts of:

storing a prior 64-pixel block of image information, the prior 64-pixel block of image information representing a prior image;

storing a next 64-pixel block of image information, the next 64-pixel block of image information representing a next image;

generating prior motion vector information in response to the prior 64-pixel block of image information;

generating next motion vector information in response to the next 64-pixel block of image information; and

generating temporally interpolated image information by temporally interpolating between the prior motion vector information and the next motion vector information in response to the prior 64-pixel block of image information and in response to the next 64-pixel block of image information.

110. (Currently amended) A process as set forth in claim 109, further comprising the act of:

communicating output image information over an RF data link in response to the temporally interpolated image information image information.

111. (Currently amended) A process as set forth in claim ~~109~~ 533, further comprising the act of making a ~~DVD~~ vehicle product in response to the process.

112. (Currently amended) A process as set forth in claim 109, further comprising the acts of:

storing at least two digital bits of information ~~in a plurality of levels~~ in each of a plurality of ~~multilevel~~ multibit memory cells;

generating accessed digital information in response to the at least two digital bits of information stored in each of the plurality of ~~multilevel~~ multibit memory cells; and

generating the temporally interpolated image information in response to the accessed digital information.

113. (Previously presented) A process comprising the acts of:

storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;

storing a frame of next pixel image information, the frame of next pixel image information representing a next image; and

generating subpixel change information having subpixel resolution by subtracting between the frame of prior pixel image information and the frame of next pixel image information.

114. (Currently amended) A process as set forth in claim 113, further comprising the act of making a ~~digital video disk~~ building product in response to the process ~~set forth in claim 113~~.

115. (Previously presented) A process comprising the acts of:

storing prior pixel image information, the prior pixel image information representing a prior image;

storing next pixel image information, the next pixel image information representing a next image; and

generating 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information and in response to the next pixel image information.

116. (Currently amended) A process ~~as set forth in claim 115, further~~ comprising the acts of: ~~making a video disk product in response to the 64-pixel blocks of spatially interpolated image information~~

storing computer instructions;

generating sonar image information; and

generating temporally interpolated image information in response to the sonar image information and in response to the computer instructions.

-A3-

117. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a spatial interpolation circuit generating a frame of spatially interpolated image information in response to the frame of prior pixel image information and in response to the frame of next pixel image information;~~

~~a scale factor input circuit generating scale factor information;~~

~~a scale factor memory;~~

~~a writing circuit coupled to the scale factor memory and coupled to the scale factor input circuit, the writing circuit writing scale factor input information into the scale factor memory in response to the scale factor information, the scale factor memory storing the scale factor input information; and~~

~~a scaling processor coupled to the spatial interpolation circuit and coupled to the scale factor memory, the scaling processor generating scaled image information in response to the scale factor input information stored in the scaled memory and in response to the frame of spatially interpolated image information generated by the spatial interpolation circuit~~ storing computer instructions;

generating X-ray image information; and

generating temporally interpolated image information in response to the X-ray image information and in response to the computer instructions.

118. (Currently amended) A ~~system as set forth in claim 117, further~~ process comprising the acts of:

~~an RF communication link coupled to the scaling processor, the RF communication link communicating output image information in response to the scaled image information generated by the scaling processor~~ storing computer instructions;

generating navigation information; and

generating temporally interpolated image information in response to the navigation information and in response to the computer instructions.

119. (Currently amended) A system ~~as set forth in claim 117, further~~ comprising:

an integrated circuit ~~multilevel~~ multibit memory having a plurality of ~~multilevel~~ multibit memory cells, each of the plurality of ~~multilevel~~ multibit memory cells storing at least two digital bits of information ~~in a plurality of levels~~;

an integrated circuit ~~multilevel~~ multibit memory accessing circuit generating accessed digital information in response to the at least two digital bits of information stored in each of the plurality of ~~multilevel~~ multibit memory cells; and

~~the scaling~~ a processor generating ~~the scaled~~ kernel filtered image information in response to the accessed digital information ~~generated by the integrated circuit multilevel memory accessing circuit~~.

120. (Currently amended) A ~~system as set forth in claim 115, further~~ process comprising the acts of:

storing at least two digital bits of information ~~in a plurality of levels~~ in each of a plurality of ~~multilevel~~ multibit memory cells;

generating accessed digital information in response to the at least two digital bits of information stored in each of the plurality of ~~multilevel~~ multibit memory cells; and

generating ~~the~~ 64-pixel blocks of ~~spatially interpolated~~ image information in response to the accessed digital information.

121. (Previously presented) A system comprising:

a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;

a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;

a prior vector circuit generating prior vector information in response to the frame of prior pixel image information;

a next vector circuit generating next vector information in response to the frame of next pixel image information; and

a temporal interpolation processor generating a frame of temporally interpolated image information by temporally interpolating between the frame of prior pixel image information and the frame of next pixel image information in response to the prior vector information and in response to the next vector information.

122. (Previously presented) A system as set forth in claim 121, further comprising:

an RF communication link communicating output image information in response to the frame of temporally interpolated image information.

123. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing prior pixel image information, the prior pixel image information representing a prior image;~~

~~a second memory storing next pixel image information, the next pixel image information representing a next image;~~

~~a prior vector circuit generating prior motion vector information in response to the prior pixel image information;~~

a next vector circuit generating next motion vector information in response to the next pixel image information; and

a transform processor generating transformed image information in response to the prior motion vector information, in response to the next motion vector information, in response to the prior pixel image information stored in the first memory, and in response to the next pixel image information stored in the second memory storing computer instructions;

generating camera image information; and

generating kernel filtered image information in response to the camera image information and in response to the computer instructions.

124. (Currently amended) A system as set forth in claim 123, further process comprising the acts of:

an RF communication link communicating output image information in response to the transformed image information storing computer instructions;

generating radar image information; and

generating kernel filtered image information in response to the radar image information and in response to the computer instructions.

125. (Currently amended) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image; and

generating temporally interpolated image information in response to the to the prior pixel image information and in response to the next pixel image information; and

generating transformed image information in response to the temporally interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information.

126. (Currently amended) A process as set forth in claim 125, further comprising the acts of:

communicating output image information over an RF data link in response to the transformed image information storing computer instructions;

generating tomographic image information; and

generating kernel filtered image information in response to the tomographic image information and in response to the computer instructions.

127. (Previously presented) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image; and

generating transformed image information in response to the prior pixel image information and in response to the next pixel image information.

128. (Currently amended) A process ~~as set forth in claim 127, further~~ comprising the act<u>s</u> of:

~~communicating output image information over an RF data link in response to the transformed image information~~ <u>storing computer instructions;</u>

<u>generating processed information by executing the computer instructions with a stored program computer;</u>

<u>storing digital information in a charge coupled device memory;</u>

<u>generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;</u>

<u>generating multiplexed image information in response to the computer instructions;</u>

<u>generating demultiplexed image information in response to the computer instructions;</u>

<u>generating associative information in response to the computer instructions;</u>

<u>generating VAX bus information in response to the computer instructions;</u>

<u>generating subpixel information in response to the computer instructions;</u>

<u>generating video disk information in response to the computer instructions;</u>

<u>storing first database information in a database memory;</u>

<u>generating accessed database information in response to the first database information and in response to the computer instructions;</u>

<u>generating blocks of information in response to the computer instructions;</u>

<u>storing a frame of image information in an image memory;</u>

<u>generating accessed image information by accessing in response to the frame of image information stored in the image memory;</u>

<u>generating first image information in response to the computer instructions, the first image information representing a first perspective of an image;</u>

<u>generating second image information in response to the computer instructions, the second image information representing a second perspective of the image that is X-axis offset from the first perspective of the image; and</u>

<u>generating frequency domain information in response to the computer instructions.</u>

129. (Previously presented) A process as set forth in claim 127, further comprising the act of generating artificial intelligence information in response to the transformed image information.

130. (Currently amended) A process as set forth in claim 125, further comprising the act of making a ~~display~~ product <u>in response to the process.</u>

131. (Currently amended) A ~~system~~ process comprising the acts of:

~~a memory storing pixel image information;~~

~~a subpixel change circuit generating subpixel change information having subpixel resolution by subtracting in response to the pixel image information and in response to feedback information;~~

~~a transform processor generating transformed image information in response to the pixel image information;~~

~~a scale factor input circuit generating scale factor information;~~

~~a scale factor memory;~~

~~a writing circuit writing scale factor input information into the scale factor memory in response to the scale factor input information, the scale factor memory storing the scale factor input information;~~

~~a scaling processor generating scaled image information in response to the transformed image information and in response to the scale factor input information; and~~

~~a feedback processor generating the feedback information in response to the scaled image information~~ storing computer instructions;

generating sonar image information; and

generating kernel filtered image information in response to the sonar image information and in response to the computer instructions.

132. (Currently amended) A ~~system~~ process as set forth in claim ~~131, further comprising~~ 128:

~~an RF communication link communicating output image information in response to the scaled image information~~ wherein the process is a display process, the display process further comprising the act of displaying an image in response to the computer instructions; and

wherein the database memory is a floppy disk mosaic database memory storing the first database information as first floppy disk mosaic database image information;

the process further comprising the acts of:

storing the computer instructions as compiled Basic computer instructions;

generating the processed information by executing the computer instructions with the stored program computer implemented with an S100 stored program computer;

generating the accessed database information as accessed floppy disk mosaic database image information in response to the first floppy disk mosaic database image information and in response to the computer instructions;

generating the blocks of information as 64-pixel blocks of image information in response to the computer instructions;

storing the frame of image information as a two dimensional frame of 4096 64-pixel blocks of image information in the image memory;

generating the accessed image information as accessed 64-pixel blocks of image information in response to the two dimensional frame of 4096 64-pixel blocks of image information;

generating the first image information as first field channel interlaced image information in response to the computer instructions, the first field channel interlaced image information representing the first perspective of the image as the first field perspective of the image;

generating the second image information as second field channel interlaced image information in response to the computer instructions, the second field channel interlaced image information representing the second perspective of the image as the second field perspective of the image that is X-axis offset from the first field perspective of the image; and

generating the frequency domain information by Fourier transforming in response to the computer instructions.

133. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing prior pixel image information, the prior pixel image information representing a prior image;~~

~~a second memory storing next pixel image information, the next pixel image information representing a next image;~~

~~a temporal interpolation processor coupled to the first memory and coupled to the second memory, the temporal interpolation processor generating 64-pixel blocks of temporally interpolated image information in response to the prior pixel image information and in response to the next pixel image information; and~~

~~a transform processor coupled to the temporal interpolation processor, the transform processor generating transformed image information in response to the 64-pixel blocks of temporally interpolated image information generated by the temporal interpolation processor, in response to the prior pixel image information, and in response to the next pixel image information~~ storing computer instructions;

generating X-ray image information; and

generating kernel filtered image information in response to the X-ray image information and in response to the computer instructions.

134. (Currently amended) A ~~system~~ process as set forth in claim ~~133, further comprising~~ 128:

~~an RF communication link coupled to the transform processor, the RF communication link communicating output image information in response to the transformed image information generated by the transform processor~~ wherein the database memory is a mosaic database memory storing the first database information as first mosaic database image information;

the process further comprising the acts of:

generating scrolling information;

generating the accessed database information as accessed mosaic database image information in response to the first mosaic database image information, in response to the scrolling information, and in response to the computer instructions;

generating wrap-around information; and

writing the frame of image information into the image memory in response to the accessed mosaic database image information and in response to the wrap-around information.

135. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first frame memory storing a prior frame of image information;~~

~~a second frame memory storing a next frame of image information;~~

~~a temporal interpolation processor generating a temporally interpolated frame of image information in response to the prior frame of image information and in response to the next frame of image information; and~~

~~a transform processor coupled to the temporal interpolation processor, the transform processor generating transformed image information in response to the frame of temporally interpolated image information generated by the temporal interpolation processor, in response to the prior frame of image information, and in response to the next frame of image information~~ storing computer instructions;

generating television image information; and

generating kernel filtered image information in response to the television image information and in response to the computer instructions.

136. (Currently amended) A ~~system as set forth in claim 135, further~~ process comprising the acts of:

~~an RF communication link coupled to the transform processor, the RF communication link communicating output image information in response to the transformed image information generated by the transform processor~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating first transformed image information in response to the computer instructions;

generating second transformed image information in response to the computer instructions;

generating weight information;

generating third image information;

generating weighted image information by filtering in response to the weight information, in response to the third image information, and in response to the computer instructions;

generating scale factor information;

generating fourth image information; and

generating scaled image information in response to the scale factor information, in response to the fourth image information, and in response to the computer instructions.

137. (Currently amended) A ~~system~~ process comprising ~~the acts of~~:

~~a first memory storing prior pixel image information, the prior pixel image information representing a prior image;~~

~~a second memory storing next pixel image information, the next pixel image information representing a next image;~~

~~a prior vector circuit generating prior motion vector information in response to the prior pixel image information;~~

~~a next vector circuit generating next motion vector information in response to the next pixel image information;~~

~~a spatial interpolation circuit generating spatially interpolated image information in response to the prior motion vector information, in response to the next motion vector information, in response to the prior pixel image information, and in response to the next pixel image information;~~

~~a transform processor generating transformed image information in response to the spatially interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information;~~

~~a weight input circuit generating weight information;~~

~~a weight memory;~~

~~a writing circuit writing weight input information into the weight memory in response to the weight information, the weight memory storing the weight input information; and~~

~~a weighting processor generating weighted image information in response to the transformed image information and in response to the weight input information stored in the weight memory~~ storing computer instructions;

generating camera image information; and

generating pattern recognition information in response to the camera image information and in response to the computer instructions.

138. (Currently amended) A ~~system~~ process as set forth in claim ~~137~~ 136, further comprising the acts of:

~~an RF communication link communicating output image information in response to the weighted image information~~ storing a frame of image information in an image memory;

generating the first transformed image information as Fourier transformed image information in response to the computer instructions;

generating the second transformed image information as second rotational translational zoom transformed image information in response to the computer instructions;

generating frequency domain information in response to the computer instructions;

generating inverse transformed frequency domain information by inverse Fourier transforming in response to the computer instructions and in response to the frequency domain information;

generating the weight information as kernel weight information, the kernel weight information comprising a nine weight kernel of kernel weight information;

generating the weighted image information as kernel weighted image information by kernel filtering in response to the kernel weight information, in response to the third image information, and in response to the computer instructions;

generating the scale factor information as kernel normalization scale factor information; and

generating the scaled image information as kernel scaled normalization image information in response to the kernel normalization scale factor information, in response to the fourth image information, and in response to the computer instructions.

139. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a spatial interpolation circuit generating a frame of spatially interpolated image information in response to the frame of prior pixel image information stored in the first memory and in response to the frame of next pixel image information stored in the second memory; and~~

~~a subpixel vector change circuit generating subpixel vector change information generated by the subpixel vector change circuit having subpixel resolution in response to the frame of prior pixel image information stored in the first memory and in response to the frame of next pixel image information stored in the second memory~~ storing computer instructions;

generating GPS navigation information; and

generating kernel filtered image information in response to the GPS navigation information and in response to the computer instructions.

140. (Currently amended) A ~~system as set forth in claim 139, further~~ process comprising the acts of:

~~an RF communication link communicating output image information in response to the frame of spatially interpolated image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating overlaid information in response to the computer instructions;

generating undersampled information in response to the computer instructions;

generating oversampled information in response to the computer instructions;

generating spatially interpolated information in response to the computer instructions;

generating temporally interpolated information in response to the computer instructions; and

displaying an image with a display device in response to the computer instructions.

141. (Previously presented) A system comprising:

a first memory storing prior pixel image information, the prior pixel image information representing a prior image;

a second memory storing next pixel image information, the next pixel image information representing a next image;

a prior vector circuit generating prior vector information in response to the prior pixel image information;

a next vector circuit generating next vector information in response to the next pixel image information;

a weight circuit generating weight information;

a scale factor circuit generating scale factor information; and

a weighting and scaling circuit generating scaled weighted image information in response to the prior vector information, in response to the next vector information, in response to the scale factor information, in response to the weight information, in response to the prior pixel image information, and in response to the next pixel image information.

142. (Previously presented) A system as set forth in claim 141, further comprising:

an RF communication link communicating output image information in response to the scaled weighted image information.

143. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image;~~

~~generating weight information;~~

~~generating scale factor information; and~~

~~generating scaled weighted image information in response to the prior pixel image information, in response to the next pixel image information, in response to the scale factor information, and in response to the weight information~~ storing computer instructions;

generating infra-red image information; and

generating pattern recognition information in response to the infra-red image information and in response to the computer instructions.

144. (Currently amended) A process as set forth in claim ~~143, further comprising the act of~~ 140:

~~communicating output image information over an RF data link in response to the scaled weighted image information~~ wherein the process is a display process, the display process further comprising the act of displaying an image in response to the computer instructions; and

wherein the display device is a CRT display device displaying the image as a CRT image in response to the computer instructions;

the process further comprising the acts of:

generating graphic information in response to the computer instructions;

generating memory mapped image information in response to the computer instructions;

generating the overlaid information by overlaying the graphic information onto the memory mapped image information in response to the computer instructions;

generating the undersampled information as undersampled image information to spatially compress an image in response to the computer instructions;

generating the oversampled information as oversampled image information to spatially expand an image in response to the computer instructions;

generating the spatially interpolated information as spatially interpolated image information by spatially interpolating in between first spatial image information and second spatial image information in response to the computer instructions; and

generating the temporally interpolated information as temporally interpolated image information by temporally interpolating in between first temporal image information and second temporal image information in response to the computer instructions.

145. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a scale factor input circuit generating scale factor information;~~

~~a scale factor memory;~~

~~a writing circuit writing scale factor input information into the scale memory in response to the scale factor information; and~~

~~a scaling processor generating scaled image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, and in response to the scale factor input information stored in the scale factor memory~~ storing computer instructions;

generating tomographic image information; and

generating pattern recognition information in response to the tomographic image information and in response to the computer instructions.

146. (Currently amended) A ~~system as set forth in claim 145, further~~ process comprising the acts of:

~~an RF communication link communicating output image information in response to the scaled image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating first channel display information in response to the computer instructions;

generating second channel display information in response to the computer instructions;

displaying a first channel image on a first display monitor in response to the computer instructions;

displaying a second channel image on a second display monitor in response to the computer instructions;

generating data compressed image information in response to the computer instructions;

generating data decompressed image information in response to the computer instructions; and

generating Fourier transformed image information in response to the computer instructions.

147. (Currently amended) A process ~~as set forth in claim 143, further~~ comprising the acts of:

~~generating~~ storing data compressed image information in a database memory ~~response to the scaled weighted image information~~; and

~~generating spatially interpolated image information in response to the data compressed image information;~~

generating temporally interpolated image information in response to the ~~spatially interpolated~~ data compressed image information~~; and~~

~~generating the prior pixel image information in response to the temporally interpolated image information~~.

148. (Currently amended) A process ~~as set forth in claim 143, further~~ comprising the acts of:

~~generating data compressed image information in response to the transformed image information;~~

~~generating transformed image information in response to the data compressed image information; and~~

~~generating the prior pixel image information in response to the transformed image information~~ storing computer instructions;

generating tomographic image information; and

generating zoomed image information in response to the tomographic image information and in response to the computer instructions.

149. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing prior pixel image information, the prior pixel image information representing a prior image;~~

~~a second memory storing next pixel image information, the next pixel image information representing a next image;~~

~~a subpixel vector change circuit generating subpixel vector change information having subpixel resolution in response to the prior pixel image information and in response to the next pixel image information;~~

a weight circuit generating weight information;

a scale factor circuit generating scale factor information; and

a weighting and scaling circuit coupled to the scale factor circuit and coupled to the weight circuit, the weighting and scaling circuit generating scaled weighted image information in response to the prior pixel image information, in response to the next pixel image information, in response to the scale factor information generated by the scale factor circuit, and in response to the weight information generated by the weight circuit storing computer instructions;

generating sonar image information; and

generating pattern recognition information in response to the sonar image information and in response to the computer instructions.

150. (Currently amended) A system as set forth in claim 149, further process comprising the acts of:

an RF communication link coupled to the weighting and scaling circuit, the RF communication link communicating output image information in response to the scaled weighted image information generated by the weighting and scaling circuit storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating feedback image information in response to the computer instructions;

generating 64-pixel blocks of image information in response to the computer instructions;

generating anti-aliased image information in response to the computer instructions;

generating pattern recognition information in response to the computer instructions;

generating artificial intelligence information in response to the computer instructions;

communicating information over a data link in response to the computer instructions;

controlling motion of a machine in response to the computer instructions;

generating video image information in response to the computer instructions;

generating computer-aided manufacturing information in response to the computer instructions;

and

generating computer-aided design image information in response to the computer instructions.

151. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image; and~~

~~a spatial interpolation circuit generating a frame of spatially interpolated image information in response to the frame of prior pixel image information stored in the first memory and in response to the frame of next pixel image information stored in the second memory~~ storing computer instructions;

generating X-ray image information; and

generating pattern recognition information in response to the X-ray image information and in response to the computer instructions.

152. (Currently amended) A ~~system as set forth in claim 151, further~~ process comprising the acts of:

~~an RF communication link communicating output image information in response to the frame of spatially interpolated image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating temporal interpolation image information in response to the computer instructions;

generating undersampled image information in response to the computer instructions;

generating rotated image information in response to the computer instructions;

generating translated image information in response to the computer instructions;

generating spatially expanded image information in response to the computer instructions;

generating spatially compressed image information in response to the computer instructions; and

generating warped image information in response to the computer instructions.

153. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating spatially interpolated image information in response to the pixel image information and in response to feedback information;~~

~~generating weight information;~~

~~generating scale factor information;~~

~~generating scaled weighted image information in response to the spatially interpolated image information, in response to the scale factor information, and in response to the weight information; and~~

~~generating the feedback information in response to the scaled weighted image information~~ storing computer instructions;

generating television image information; and

generating pattern recognition information in response to the television image information and in response to the computer instructions.

154. (Currently amended) A process ~~as set forth in claim 153, further~~ comprising the acts of:

~~communicating output image information over an RF data link in response to the scaled weighted image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating three dimensional perspective image information in response to the computer instructions;

generating spatially transformed image information by mapping from memory mapped image information stored in an image memory to a display media in response to the computer instructions;

generating wrapped-around vector information in response to the computer instructions;

generating a plurality of channels of image information in response to the computer instructions;

generating classification information in response to the computer instructions;

generating computer-aided manufacturing information in response to the computer instructions;

generating tomographic information in response to the computer instructions;

generating polar information in response to the computer instructions; and

generating windowed image information in response to the computer instructions.

155. (Currently amended) A ~~system~~ process comprising ~~the acts of~~:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a prior vector circuit generating prior vector information in response to the frame of prior pixel image information;~~

~~a next vector circuit generating next vector information in response to the frame of next pixel image information; and~~

~~a spatial interpolation circuit generating a frame of spatially interpolated image information in response to the prior vector information, in response to the next vector information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

generating video camera image information in response to the computer instructions;

generating infra-red image information in response to the computer instructions;

generating radar image information in response to the computer instructions;

generating navigation information in response to the computer instructions;

storing relational database image information in a relational database memory;

storing rectangular mosaic image information in the relational database memory;

generating relational database management information in response to the computer instructions; and

generating accessed database information in response to the computer instructions, in response to the relational database image information, and in response to the relational database management information.

156. (Currently amended) A ~~system as set forth in claim 155, further~~ <u>process</u> comprising <u>the acts of</u>:

~~an RF communication link coupled to the weighting circuit, the RF communication link communicating output image information in response to the frame of spatially interpolated image information~~ <u>storing computer instructions;</u>

<u>storing digital information in a charge coupled device memory;</u>

<u>generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;</u>

<u>generating multiplexed image information in response to the computer instructions;</u>

<u>generating demultiplexed image information in response to the computer instructions;</u>

<u>generating associative information in response to the computer instructions;</u>

<u>generating VAX bus information in response to the computer instructions;</u>

<u>generating subpixel information in response to the computer instructions;</u>

<u>generating video disk information in response to the computer instructions;</u>

<u>generating process control image information in response to the computer instructions;</u>

<u>controlling a process in response to the process control image information and in response to the computer instructions;</u>

<u>controlling a machine in response to the computer instructions;</u>

<u>generating graphic information in response to the computer instructions;</u>

<u>generating memory mapped image information in response to the computer instructions;</u>

<u>generating overlaid image information in response to the computer instructions, in response to the graphic information, and in response to the memory mapped image information;</u>

<u>generating kernel filtered image information in response to the computer instructions; and</u>

<u>generating kernel scaled image information in response to the computer instructions.</u>

157. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating subpixel delta information having subpixel resolution by subtracting in response to the pixel image information and in response to feedback information;~~

~~generating transformed image information in response to the pixel image information;~~

~~generating weight information;~~

~~generating scale factor information;~~

~~generating scaled weighted image information in response to the transformed image information, in response to the scale factor information, and in response to the weight information; and~~

~~generating the feedback information in response to the scaled weighted image information~~ <u>storing computer instructions;</u>

generating navigation information; and

generating pattern recognition information in response to the navigation information and in response to the computer instructions.

158. (Currently amended) A process ~~as set forth in claim 157, further~~ comprising the act<u>s</u> of:

~~communicating output image information over an RF data link in response to the scaled weighted image information~~ storing computer instructions;

storing digital information in a charge coupled device memory;

generating memory output information by accessing the digital information stored in the charge coupled device memory in response to the computer instructions;

generating multiplexed image information in response to the computer instructions;

generating demultiplexed image information in response to the computer instructions;

generating associative information in response to the computer instructions;

generating VAX bus information in response to the computer instructions;

generating subpixel information in response to the computer instructions;

generating video disk information in response to the computer instructions;

storing first stored information in a first memory;

storing second stored information in a second memory;

storing third stored information in a third memory;

generating first processed information with a first processor in response to the computer instructions and in response to the first stored information;

generating second processed information with a second processor in response to the computer instructions and in response to the second stored information; and

generating third processed information with a third processor in response to the computer instructions and in response to the third stored information.

159. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image; and~~

~~a transform processor generating transformed image information in response to the frame of prior pixel image information stored in the first memory and in response to the frame of next pixel image information stored in the second memory~~ storing computer instructions;

generating camera image information; and

generating artificial intelligence information in response to the camera image information and in response to the computer instructions.

160. (Currently amended) A ~~system~~ process as set forth in claim ~~159~~ 158, further comprising the acts of:

~~an RF communication link communicating output image information in response to the transformed image information~~ storing the first stored information in a first memory portion of a shared memory;

storing the second stored information in a second memory portion of the shared memory;

storing the third stored information in a third memory portion of the shared memory;

generating the first processed information with the first processor included in a time shared processor in response to the computer instructions and in response to the first stored information;

generating the second processed information with the second processor included in the time shared processor in response to the computer instructions and in response to the second stored information; and

generating the third processed information with the third processor included in the time shared processor in response to the computer instructions and in response to the third stored information.

161. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating transformed image information in response to the pixel image information and in response to feedback information;~~

~~generating weight information;~~

~~generating scale factor information;~~

~~generating scaled weighted image information in response to the transformed image information, in response to the scale factor information, and in response to the weight information; and~~

~~generating the feedback information in response to the scaled weighted image information~~ storing computer instructions;

generating infra-red image information; and

generating artificial intelligence information in response to the infra-red image information and in response to the computer instructions.

162. (Currently amended) A process as set forth in claim ~~161~~ 158, further comprising the acts of:

~~communicating output image information over an RF data link in response to the scaled weighted image information~~ generating television display information in response to the computer instructions;

displaying a television image in response to the television display information and in response to the computer instructions;

generating service information in response to the computer instructions; and

displaying a service image in response to the service information and in response to the computer instructions.

163. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing prior pixel image information, the prior pixel image information representing a prior image;~~

~~a second memory storing next pixel image information, the next pixel image information representing a next image;~~

~~a subpixel vector change circuit generating subpixel vector change information having subpixel resolution in response to the prior pixel image information and in response to the next pixel image information; and~~

~~a transform processor generating transformed image information in response to the prior pixel image information and in response to the next pixel image information~~ storing computer instructions;

generating radar image information; and

generating artificial intelligence information in response to the radar image information and in response to the computer instructions.

164. (Currently amended) A ~~system~~ process as set forth in claim ~~163~~ 158, further comprising the acts of:

~~an RF communication link communicating output image information in response to the transformed image information~~ storing training information;

displaying a training image in response to the training information and in response to the computer instructions;

storing television network information; and

operating a television network in response to the television network information and in response to the computer instructions.

165. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating spatially interpolated image information in response to the pixel image information stored in the memory and in response to feedback information;~~

~~generating transformed image information in response to the spatially interpolated image information;~~

~~generating weight information;~~

~~generating scale factor information;~~

~~generating scaled weighted image information in response to the transformed image information, in response to the scale factor information, and in response to the weight information; and~~

generating the feedback information in response to the scaled weighted image information storing computer instructions;

generating tomographic image information; and

generating artificial intelligence information in response to the tomographic image information and in response to the computer instructions.

166. (Currently amended) A process as set forth in claim 165, further comprising the acts of:

generating data compressed image information in response to the scaled weighted image information;

generating second transformed image information in response to the data compressed image information; and

generating the feedback image information in response to the second transformed image information storing computer instructions;

generating sonar image information; and

generating zoomed image information in response to the sonar image information and in response to the computer instructions.

167. (Currently amended) A system process comprising the acts of:

a first memory storing prior pixel image information, the prior pixel image information representing a prior image;

a second memory storing next pixel image information, the next pixel image information representing a next image;

a spatial interpolation circuit generating spatially interpolated image information in response to prior pixel image information and in response to next pixel image information; and

a transform processor coupled to the spatial interpolation circuit, the transform processor generating transformed image information in response to the spatially interpolated image information generated by the spatial interpolation circuit, in response to prior pixel image information, and in response to next pixel image information storing computer instructions;

generating sonar image information; and

generating artificial intelligence information in response to the sonar image information and in response to the computer instructions.

168. (Currently amended) A system process as set forth in claim 167 158, further comprising the acts of:

an RF communication link coupled to the weighting circuit, the RF communication link communicating output image information in response to the transformed image information generated by the weighting circuit storing business information;

displaying a business image in response to the business information and in response to the computer instructions;

making a business decision in response to the business information and in response to the computer instructions;

storing disk information in a disk memory; and

generating accessed information by accessing the disk information stored in the disk memory in response to the computer instructions.

169. (Currently amended) A ~~system~~ process comprising the acts of:

~~a first memory storing a frame of prior pixel image information, the frame of prior pixel image information representing a prior image;~~

~~a second memory storing a frame of next pixel image information, the frame of next pixel image information representing a next image;~~

~~a spatial interpolation circuit generating a frame of spatially interpolated image information in response to the frame of prior pixel image information and in response to the frame of next pixel image information;~~

~~a subpixel vector change circuit generating subpixel vector change information having subpixel resolution in response to the frame of prior pixel image information and in response to the frame of next pixel image information; and~~

~~a transform processor generating transformed image information in response to the frame of spatially interpolated image information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information~~ storing computer instructions;

generating X-ray image information; and

generating artificial intelligence information in response to the X-ray image information and in response to the computer instructions.

170. (Currently amended) A ~~system~~ process as set forth in claim ~~169~~ 158, further comprising the acts of:

~~an RF communication link communicating output image information in response to the transformed image information~~ storing DVD information in a DVD memory; and

generating accessed information by accessing the DVD information stored in the DVD memory in response to the computer instructions.

171. (Previously presented) A process comprising the acts of:

storing prior pixel image information, the prior pixel image information representing a prior image;

storing next pixel image information, the next pixel image information representing a next image;

generating prior motion vector information in response to the prior pixel image information;

generating next motion vector information in response to the next pixel image information;

generating 64-pixel blocks of spatially interpolated image information in response to the prior motion vector information, in response to the next motion vector information, in response to the prior pixel image information, and in response to the next pixel image information; and

generating transformed image information in response to the 64-pixel blocks of spatially interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information.

172. (Previously presented) A process as set forth in claim 171, further comprising the act of:

communicating output image information over an RF data link in response to the transformed image information.

173. (Currently amended) A process ~~as set forth in claim 171, further~~ comprising the acts of:

~~generating data-compressed image information in response to the transformed image information;~~

~~generating second spatially interpolated image information in response to the data-compressed image information;~~

~~generating temporally interpolated image information in response to the second spatially interpolated image information; and~~

~~generating the prior pixel image information in response to the temporally interpolated image information~~ storing computer instructions;

generating X-ray image information; and

generating zoomed image information in response to the X-ray image information and in response to the computer instructions.

Claims 174 - 186 (Canceled)

187. (Currently amended) A process comprising the acts of:

storing prior pixel image information, the prior pixel image information representing a prior image;

storing next pixel image information, the next pixel image information representing a next image;

generating prior vector information in response to the prior pixel image information;

generating next vector information in response to the next pixel image information; and

generating 64-pixel blocks of ~~spatially~~ temporally interpolated image information in response to the prior vector information, in response to the next vector information, in response to the prior pixel image information, and in response to the next pixel image information~~; and~~

~~generating transformed image information in response to the 64-pixel blocks of spatially interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information.~~

188. (Currently amended) A process ~~as set forth in claim 187, further~~ comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera;

generating feedback information in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information; <u>and</u>

generating zoomed image information in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information; ~~and~~

~~writing database information into a database memory in response to the computer instructions, in response to the television camera information, and in response to the transformed image information.~~

189. (Currently amended) A process ~~as set forth in claim 187, further~~ comprising the acts of:

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the transformed image information; and~~

~~generating the prior pixel image information in response to the scaled weighted image information~~ <u>storing computer instructions;</u>

<u>generating television image information; and</u>

<u>generating zoomed image information in response to the television image information and in response to the computer instructions.</u>

190. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating radar information; <u>and</u>

~~generating temporally interpolated image information in response to the computer instructions and in response to the radar information;~~

~~writing~~ <u>inputting</u> database information into a database memory in response to the computer instructions and in response to the radar information;

~~generating spatially interpolated image information in response to the pixel image information stored in the memory;~~

~~generating subpixel change image information having subpixel resolution by subtracting in response to the pixel image information stored in the memory and in response to feedback information; and~~

~~generating the feedback information in response to the subpixel change image information, in response to the computer instructions, and in response to the radar information.~~

191. (Currently amended) A process as set forth in claim ~~190~~ 158, further comprising the act<u>s</u> of:

~~communicating output image information in response to the spatially interpolated image information~~ <u>storing digital video disk information in a digital video disk memory; and</u>

<u>generating accessed information by accessing the digital video disk information stored in the digital video disk memory in response to the computer instructions.</u>

192. (Currently amended) A process as set forth in claim ~~190~~ 158, further comprising the acts of:

~~generating data compressed image information in response to the spatially interpolated image information;~~

~~generating transformed image information in response to the data compressed image information; and~~

~~generating the feedback image information in response to the transformed image information~~ <u>generating animation information in response to the computer instructions;</u>

<u>displaying an animated image in response to the animation information;</u>

<u>storing repair information; and</u>

<u>displaying a repair image in response to the repair information and in response to the computer instructions.</u>

193. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating delta subpixel image information having subpixel resolution by subtracting in response to the pixel image information stored in the memory and in response to feedback information; and~~

~~generating the feedback information in response to the delta subpixel image information~~ <u>storing computer instructions;</u>

<u>generating television image information; and</u>

<u>generating artificial intelligence information in response to the television image information and in response to the computer instructions.</u>

194. (Currently amended) A process as set forth in claim ~~193~~ 158, further comprising the acts of:

~~communicating output image information over an RF data link in response to the pixel image information stored in the memory~~ generating game information in response to the computer instructions;

displaying a game image in response to the game information and in response to the computer instructions;

storing airline information;

displaying an airline image in response to the airline information and in response to the computer instructions;

storing real estate information; and

displaying a real estate image in response to the real estate information and in response to the computer instructions.

195. (Currently amended) A process ~~as set forth in claim 190, further~~ comprising the acts of:

generating data compressed image information ~~in response to the spatially interpolated image information~~;

storing weight information;

storing scale factor information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating transformed image information in response to the scaled weighted image information; and

~~generating second spatially interpolated image information in response to the transformed image information;~~

generating temporally interpolated image information in response to the ~~second spatially interpolated~~ transformed image information; ~~and~~

~~generating the feedback image information in response to the temporally interpolated image information.~~

196. (Currently amended) A process ~~as set forth in claim 193, further~~ comprising the acts of:

~~generating transformed image information in response to the pixel image information; and~~

~~generating the feedback image information in response to the transformed image information~~ storing computer instructions;

generating GPS navigation information; and

generating zoomed image information in response to the GPS navigation information and in response to the computer instructions.

197. (Currently amended) A process ~~as set forth in claim 193, further~~ comprising the acts of:

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the pixel image information;~~

~~generating transformed image information in response to the scaled weighted image information;~~

~~generating spatially interpolated image information in response to the transformed image information;~~

~~generating temporally interpolated image information in response to the spatially interpolated image information; and~~

~~generating the feedback image information in response to the temporally interpolated image information~~ storing computer instructions;

generating camera image information; and

generating graphic overlaid image information in response to the camera image information and in response to the computer instructions.

198. (Previously presented) A process comprising the acts of:

storing pixel image information in a memory;

generating subpixel difference image information having subpixel resolution in response to the pixel image information and in response to feedback information; and

generating the feedback information in response to the subpixel difference image information.

199. (Previously presented) A process as set forth in claim 198, further comprising the act of:

communicating output image information over an RF data link in response to the pixel image information.

200. (Previously presented) A process as set forth in claim 198, further comprising the acts of:

generating data compressed image information in response to the pixel image information;

storing weight information;

storing scale factor information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating transformed image information in response to the scaled weighted image information;

generating spatially interpolated image information in response to the transformed image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the feedback image information in response to the temporally interpolated image information.

201. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating 64-pixel blocks of spatially interpolated image information in response to the pixel image information stored in the memory and in response to feedback information;~~

storing computer instructions;

~~generating GPS navigation information in response to the computer instructions;~~

generating ~~television~~ video camera information with a ~~television~~ video camera;

generating translated image information in response to the computer instructions and in response to the ~~television~~ video camera information; and

~~writing~~ loading database information into a database memory in response to the computer instructions and in response to the ~~television~~ video camera information~~;~~

~~generating weight information;~~

~~writing weight input information into a weight memory in response to the weight information;~~

~~storing the weight input information in the weight memory;~~

~~generating weighted image information in response to the 64-pixel blocks of spatially interpolated image information and in response to the weight input information stored in the weight memory; and~~

~~generating the feedback information in response to the weighted image information, in response to the computer instructions, and in response to the television camera information.~~

202. (Currently amended) A process as set forth in claim ~~201~~ 158, further comprising the acts of:

~~communicating output image information over an RF data link in response to the weighted image information~~ generating computer aided design information in response to the computer instructions;

displaying a computer aided design image in response to the computer aided design information and in response to the computer instructions;

making a product in response to the computer aided design information and in response to the computer instructions;

storing vehicular information;

displaying a vehicular image in response to the vehicular information and in response to the computer instructions; and

making a vehicle in response to the vehicular information and in response to the computer instructions.

203. (Currently amended) A process ~~as set forth in claim 201, further~~ comprising the acts of:

~~generating data compressed image information in response to the scaled weighted image information;~~

~~generating transformed image information in response to the data compressed image information; and~~

~~generating the feedback image information in response to the transformed image information~~ storing computer instructions;

generating infra-red image information; and

generating graphic overlaid image information in response to the infra-red image information and in response to the computer instructions.

204. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image;~~

~~generating 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information and in response to the next pixel image information;~~

~~generating scale factor information;~~

~~writing scale factor input information into a memory in response to the scale factor information;~~

~~storing the scale factor input information in the memory; and~~

~~generating scaled image information in response to the 64-pixel blocks of spatially interpolated image information and in response to the scale factor input information stored in the memory~~ storing computer instructions;

generating camera image information; and

generating warped image information in response to the camera image information and in response to the computer instructions.

205. (Currently amended) A process as set forth in claim ~~204~~ 158, further comprising the acts of:

~~communicating output image information over an RF data link in response to the scaled image information~~ generating computer aided design information in response to the computer instructions;

displaying a computer aided design image in response to the computer aided design information and in response to the computer instructions;

making a product in response to the computer aided design information and in response to the computer instructions;

storing architectural information;

displaying an architectural image in response to the architectural information and in response to the computer instructions; and

making an architecture in response to the architectural information and in response to the computer instructions.

206. (Currently amended) A process ~~as set forth in claim 204, further~~ comprising the acts of:

~~generating data compressed image information in response to the scaled image information;~~

~~generating temporally interpolated image information in response to the data compressed image information; and~~

~~generating the prior pixel image information in response to the temporally interpolated image information~~ storing computer instructions;

generating radar image information; and

generating graphic overlaid image information in response to the radar image information and in response to the computer instructions.

207. (Currently amended) A process ~~as set forth in claim 204, further~~ comprising the acts of:

storing at least two digital bits of information ~~in a plurality of levels~~ in each of a plurality of ~~multilevel~~ multibit memory cells;

generating accessed digital information in response to the at least two digital bits of information stored in each of the plurality of ~~multilevel~~ multibit memory cells; and

generating ~~the~~ 64-pixel blocks of ~~spatially interpolated~~ image information in response to the accessed digital information.

208. (Currently amended) A process as set forth in claim ~~204~~ 158, further comprising the acts of:

~~making a manufactured product in response to the 64-pixel blocks of spatially interpolated image information~~ generating computer aided design information in response to the computer instructions;

displaying a computer aided design image in response to the computer aided design information and in response to the computer instructions;

making a product in response to the computer aided design information and in response to the computer instructions;

storing integrated circuit process information;

displaying an integrated circuit process image in response to the integrated circuit process information and in response to the computer instructions; and

making an integrated circuit in response to the integrated circuit process information and in response to the computer instructions.

209. (Currently amended) A process comprising the acts of:

storing prior pixel image information, the prior pixel image information representing a prior

image;

storing next pixel image information, the next pixel image information representing a next image;

generating prior motion vector information in response to the prior pixel image information;

generating next motion vector information in response to the next pixel image information; and

generating 64-pixel blocks of ~~spatially~~ temporally interpolated image information in response to

the prior motion vector information, in response to the next motion vector information ˏ in response to the prior

pixel image information, and in response to the next pixel image information.

210. (Currently amended) A process as set forth in claim ~~209~~ 158, further comprising the act_s of:

~~communicating output image information over an RF data link in response to the 64-pixel blocks~~

~~of spatially interpolated image information~~ generating seismic information in response to the computer instructions;

exploring for oil in response to the seismic information; and

exploring for minerals in response to the seismic information.

211. (Currently amended) A process ~~as set forth in claim 209, further~~ comprising the acts of:

generating data compressed 64-pixel blocks of image information ~~in response to the 64-pixel~~

~~blocks of spatially interpolated image information~~;

storing weight information;

storing scale factor information; and

generating 64-pixel blocks of scaled weighted image information in response to the weight

information, in response to the scale factor information, and in response to the data compressed 64-pixel blocks of

image information ~~; and~~

~~generating the prior pixel image information in response to the 64-pixel blocks of scaled weighted~~

~~image information~~.

212. (Currently amended) A process comprising the acts of:

~~storing a prior 64-pixel block of image information, the prior 64-pixel block of image information~~

~~representing a prior image;~~

~~storing a next 64-pixel block of image information, the next 64-pixel block of image information~~

~~representing a next image;~~

~~generating prior motion vector information in response to the prior 64-pixel block of image~~

~~information;~~

generating next motion vector information in response to the next 64-pixel block of image information;

generating a temporally interpolated 64-pixel block of image information by temporally interpolating in response to the prior motion vector information, in response to the next motion vector information, in response to the prior 64-pixel block of image information, and in response to the next 64-pixel block of image information; and

generating transformed image information in response to the temporally interpolated 64-pixel block of image information, in response to the prior 64-pixel block of image information, and in response to the next 64-pixel block of image information storing computer instructions;

generating infra-red image information; and

generating warped image information in response to the infra-red image information and in response to the computer instructions.

213. (Currently amended) A process as set forth in claim 212 158, further comprising the acts of:

communicating output image information over an RF data link in response to the transformed image information generating communication information in response to the computer instructions; and

communicating data link information to a remote location over a data link in response to the communication information.

214. (Currently amended) A process as set forth in claim 212, further comprising the acts of:

generating data compressed 64-pixel blocks of image information in response to the 64-pixel blocks of transformed image information;

storing weight information;

storing scale factor information;

generating 64-pixel blocks of scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed 64-pixel blocks of image information; and

generating the prior 64-pixel block of image information in response to the 64-pixel blocks of scaled weighted image information storing computer instructions;

generating tomographic image information; and

generating graphic overlaid image information in response to the tomographic image information and in response to the computer instructions.

215. (Currently amended) A process comprising the acts of:

storing pixel image information in a memory;

generating transformed image information in response to the pixel image information stored in the

~~memory and in response to feedback information; and~~

~~generating the feedback information in response to the transformed image information~~ storing computer instructions;

generating radar image information; and

generating warped image information in response to the radar image information and in response to the computer instructions.

216. (Currently amended) A process as set forth in claim 215, further comprising the acts of:

~~communicating output image information over an RF data link in response to the pixel image information stored in the memory~~ generating second radar image information; and

generating the warped image information in response to the second radar image information and in response to the computer instructions.

217. (Currently amended) A process ~~as set forth in claim 215, further~~ comprising the acts of:

~~generating data compressed image information in response to the transformed image information;~~

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;~~

~~generating second transformed image information in response to the scaled weighted image information;~~

~~generating spatially interpolated image information in response to the second transformed image information;~~

~~generating temporally interpolated image information in response to the of spatially interpolated image information; and~~

~~generating the feedback image information in response to the temporally interpolated image information~~ storing computer instructions;

generating X-ray image information; and

generating graphic overlaid image information in response to the X-ray image information and in response to the computer instructions.

218. (Currently amended) A process comprising the acts of:

~~storing pixel image information in a memory;~~

~~generating transformed image information in response to pixel image information and in response to feedback information;~~

~~generating scale factor information;~~

writing scale factor input information into a scale memory in response to the scale factor information;

storing the scale factor input information in the scale memory;

generating scaled image information in response to the transformed image information and in response to the scale factor input information stored in the scale memory; and

generating the feedback information in response to the scaled image information storing computer instructions;

generating tomographic image information; and

generating warped image information in response to the tomographic image information and in response to the computer instructions.

219. (Currently amended) A process as set forth in claim 218, further comprising the acts of:

generating data compressed image information in response to the scaled image information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating second transformed image information in response to the scaled weighted image information; and

generating second spatially-interpolated image information in response to the second transformed image information;

generating temporally-interpolated image information in response to the second spatially-interpolated image information; and

generating the feedback image information in response to the temporally-interpolated transformed image information.

220. (Currently amended) A process as set forth in claim 219 218, further comprising the act of:

communicating data link output image information over an RF data link in response to the transformed scaled image information.

221. (Currently amended) A process as set forth in claim 218 215, further comprising the acts of:

making a design product in response to the transformed image information; and

making a second product in response to the design product generating camera image information; and

generating the warped image information in response to the camera image information and in response to the computer instructions.

222. (Currently amended) A process as set forth in claim ~~218~~ 215, further comprising the act~~s~~ of:

~~making a signal product in response to the transformed image information~~ generating infra-red image information; and

generating the warped image information in response to the infra-red image information and in response to the computer instructions.

223. (Previously presented) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating subpixel vector change information having subpixel resolution in response to the prior pixel image information and in response to the next pixel image information; and

generating transformed image information in response to the prior pixel image information and in response to the next pixel image information.

224. (Currently amended) A process as set forth in claim ~~223~~ 105, further comprising the act~~s~~ of:

~~communicating output image information over an RF data link in response to the transformed image information~~ generating second camera image information; and

generating the temporally interpolated image information in response to the second camera image information and in response to the computer instructions.

225. (Currently amended) A process as set forth in claim 223, further comprising the acts of:

generating data compressed image information in response to the transformed image information;

storing scale factor information;

generating scaled image information in response to the scale factor information and in response to the data compressed image information; and

generating the prior pixel image information in response to the scaled image information.

226. (Currently amended) A process comprising the acts of:

~~storing a frame of prior pixel image information representing a prior image;~~

~~storing a frame of next pixel image information representing a next image;~~

~~generating a frame of spatially interpolated image information in response to the frame of prior pixel image information and in response to the frame of next pixel image information; and~~

~~generating transformed image information in response to the frame of spatially interpolated image information, in response to the frame of prior pixel image information, and in response to the frame of next pixel image information~~ storing computer instructions;

generating sonar image information; and

generating warped image information in response to the sonar image information and in response to the computer instructions.

227. (Currently amended) A process as set forth in claim ~~226~~ 105, further comprising the act~~s~~ of:

~~communicating output image information over an RF data link in response to the transformed image information~~ generating infra-red image information; and

generating the temporally interpolated image information in response to the infra-red image information and in response to the computer instructions.

228. (Currently amended) A process ~~as set forth in claim 226, further~~ comprising the acts of:

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the transformed image information; and~~

~~generating the frame of prior pixel image information in response to the scaled weighted image information~~ storing computer instructions;

generating television image information; and

generating graphic overlaid image information in response to the television image information and in response to the computer instructions.

229. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image;~~

~~generating 64 pixel blocks of spatially interpolated image information in response to the prior pixel image information and in response to the next pixel image information; and~~

~~generating transformed image information in response to the 64 pixel blocks of spatially interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information~~ storing computer instructions;

generating X-ray image information; and

generating warped image information in response to the X-ray image information and in response to the computer instructions.

230. (Currently amended) A process as set forth in claim ~~229~~ 106, further comprising the act~~s~~ of:

~~communicating output image information over an RF data link in response to the transformed image information~~ generating second infra-red image information; and

generating the temporally interpolated image information in response to the second infra-red image information and in response to the computer instructions.

231. (Currently amended) A process ~~as set forth in claim 229, further~~ comprising the acts of:

~~storing weight information;~~

~~generating weighted image information in response to the weight information and in response to the transformed image information; and~~

~~generating the prior pixel image information in response to the weighted image information~~ storing computer instructions;

generating navigation information; and

generating graphic overlaid image information in response to the navigation information and in response to the computer instructions.

232. (Currently amended) A process comprising the acts of:

storing pixel image information ~~in a memory~~;

generating 64-pixel blocks of ~~spatially interpolated~~ image information in response to the pixel image information;

generating delta subpixel information having subpixel resolution in response to the pixel image information and in response to feedback information; and

~~generating transformed image information in response to 64-pixel blocks of spatially interpolated image information; and~~

generating the feedback information in response to the delta subpixel ~~transformed image~~ information.

233. (Currently amended) A process as set forth in claim 232, further comprising the act of:

communicating ~~output~~ data link image information over an RF data link in response to the ~~transformed image~~ delta subpixel information.

234. (Previously presented) A process as set forth in claim 223, further comprising the acts of:

generating data compressed image information in response to the transformed image information;

generating spatially interpolated image information in response to the data compressed image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the prior pixel image information in response to the temporally interpolated image information.

235. (Currently amended) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating prior motion vector information in response to the prior pixel image information;

generating next motion vector information in response to the next pixel image information; and

generating multiplexed ~~spatially interpolated~~ image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior motion vector information ‚ and in response to the next motion vector information.

236. (Currently amended) A process as set forth in claim 235, further comprising the act of:

communicating <u>data link</u> ~~output~~ image information over an RF data link in response to the multiplexed ~~spatially interpolated~~ image information.

237. (Currently amended) A process as set forth in claim 235, further comprising the acts of:

storing weight information;

storing scale factor information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the ~~spatially interpolated~~ <u>multiplexed</u> image information; and

generating the prior pixel image information in response to the scaled weighted image information.

238. (Previously presented) A process comprising the acts of:

storing a frame of prior pixel image information representing a prior image;

storing a frame of next pixel image information representing a next image;

generating subpixel vector change information having subpixel resolution in response to the frame of prior pixel image information and in response to the frame of next pixel image information;

generating weight information; and

generating weighted image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, and in response to the weight information.

239. (Previously presented) A process as set forth in claim 238, further comprising the act of:

communicating output image information over an RF data link in response to the weighted image information.

240. (Previously presented) A process as set forth in claim 238, further comprising the acts of:

generating spatially interpolated image information in response to the weighted image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the frame of prior pixel image information in response to the temporally interpolated image information.

241. (Previously presented) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating weight information;

generating scale factor information;

writing weight input information into a memory in response to the weight information;

storing the weight input information in the memory; and

generating scaled weighted image information in response to the prior pixel image information, in response to the next pixel image information, in response to the scale factor information, and in response to the weight input information.

242. (Previously presented) A process as set forth in claim 241, further comprising the act of:

communicating output image information over an RF data link in response to the scaled weighted image information.

243. (Previously presented) A process as set forth in claim 241, further comprising the acts of:

generating spatially interpolated image information in response to the scaled weighted image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the prior pixel image information in response to the temporally interpolated image information.

244. (Previously presented) A process comprising the acts of:

storing a prior 64-pixel block of pixel image information;

storing a next 64-pixel block of pixel image information; and

generating a temporally interpolated 64-pixel block of image information by temporally interpolating between the prior 64-pixel block of pixel image information and the next 64-pixel block of pixel image information.

245. (Previously presented) A process as set forth in claim 244, further comprising the act of:

communicating output image information over an RF data link in response to the temporally interpolated 64-pixel block of image information.

246. (Currently amended) A process as set forth in claim 244, further comprising the acts of:

storing weight information;

storing scale factor information;

generating a 64-pixel block of scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the temporally interpolated 64-pixel block of image information; and

generating the prior 64-pixel block of pixel image information in response to the 64-pixel block of scaled weighted image information.

247. (Currently amended) A process as set forth in claim 244, further comprising the acts of:

generating a spatially interpolated 64-pixel block of image information in response to the temporally interpolated 64-pixel block of image information;

generating a second temporally interpolated 64-pixel block of image information in response to the spatially interpolated 64-pixel block of image information; and

generating the prior 64-pixel block of pixel image information in response to the second temporally interpolated 64-pixel block of image information.

248. (Currently amended) A system as set forth in claim 105, further comprising the acts of:

~~wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information~~ generating radar image information; and

generating the temporally interpolated image information in response to the radar image information and in response to the computer instructions.

249. (Currently amended) A process comprising the acts of:

~~storing a frame of prior pixel image information representing a prior image;~~

~~storing a frame of next pixel image information representing a next image;~~

~~generating prior vector information in response to the frame of prior pixel image information;~~

~~generating next vector information in response to the frame of next pixel image information;~~

~~generating weight information;~~

~~generating scale factor information;~~

~~writing weight input information into a memory in response to the weight information;~~

~~storing the weight input information in the memory;~~

~~generating scaled weighted image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, in response to the scale factor information, in response to the weight input information stored in the memory, in response to the prior vector information, and in response to the next vector information; and~~

~~generating reduced resolution image information in response to the scaled weighted image information~~ storing computer instructions;

generating television image information; and

generating warped image information in response to the television image information and in response to the computer instructions.

250. (Currently amended) A process as set forth in claim ~~249~~ 106, further comprising the acts of:

~~communicating output image information over an RF data link in response to the reduced resolution image information~~ generating radar image information; and

generating the temporally interpolated image information in response to the radar image information and in response to the computer instructions.

251. (Currently amended) A process as set forth in claim ~~249~~ 106, further comprising the acts of:

~~generating data compressed image information in response to the reduced resolution image information;~~

~~generating transformed image information in response to the data compressed image information; and~~

~~generating the frame of prior pixel image information in response to the transformed image information~~ generating camera image information; and

generating the temporally interpolated image information in response to the camera image information and in response to the computer instructions.

-A45-

252. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image; and~~

~~generating spatially interpolated image information in response to the prior pixel image~~ ~~information and in response to the next pixel image information~~ storing computer instructions;

generating GPS navigation information; and

generating warped image information in response to the GPS navigation information and in response to the computer instructions.

253. (Currently amended) A process as set forth in claim ~~252~~ 123, further comprising the act<u>s</u> of:

~~communicating output image information over an RF data link in response to the spatially~~ ~~interpolated image information~~ generating second camera image information; and

generating the kernel filtered image information in response to the second camera image information and in response to the computer instructions.

254. (Currently amended) A process as set forth in claim ~~252~~ 123, further comprising the act<u>s</u> of:

~~storing weight information;~~

~~generating weighted image information in response to the weight information and in response to~~ ~~the spatially interpolated image information; and~~

~~generating the prior pixel image information in response to the weighted image information~~ generating infra-red image information; and

generating the kernel filtered image information in response to the infra-red image information and in response to the computer instructions.

255. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image; and~~

~~generating 64-pixel blocks of spatially interpolated image information in response to the prior~~ ~~pixel image information and in response to the next pixel image information~~ storing computer instructions;

generating infra-red image information; and

generating translated rotated image information in response to the infra-red image information and in response to the computer instructions.

256. (Currently amended) A process as set forth in claim 255, further comprising the act~~s~~ of:

~~communicating output image information over an RF data link in response to the 64-pixel blocks~~ ~~of spatially interpolated image information~~ generating second infra-red image information; and

generating the translated rotated image information in response to the second infra-red image information and in response to the computer instructions.

257. (Currently amended) A process as set forth in claim 255, further comprising the acts of:

~~storing weight information;~~

~~storing scale factor information;~~

~~generating 64-pixel blocks of scaled weighted image information in response to the weight~~ ~~information, in response to the scale factor information, and in response to the 64-pixel blocks of spatially~~ ~~interpolated image information; and~~

~~generating the prior pixel image information in response to the 64-pixel blocks of scaled weighted~~ ~~image information~~ generating radar image information; and

generating the translated rotated image information in response to the radar image information and in response to the computer instructions.

258. (Currently amended) A process comprising the acts of:

~~storing a frame of prior pixel image information representing a prior image;~~

~~storing a frame of next pixel image information representing a next image;~~

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating radar information; and

generating feedback information in response to the computer instructions and in response to the radar information~~;~~

~~generating subpixel image information in response to the computer instructions and in response to~~ ~~the radar information;~~

~~writing database information into a database memory in response to the computer instructions and~~ ~~in response to the radar information;~~

~~generating prior motion vector information in response to the frame of prior pixel image~~ ~~information and in response to the feedback information;~~

~~generating next motion vector information in response to the frame of next pixel image~~ ~~information and in response to the feedback information; and~~

~~generating a frame of spatially interpolated image information in response to the frame of prior~~ ~~pixel image information, in response to the frame of next pixel image information, in response to the prior motion~~ ~~vector information, and in response to the next motion vector information.~~

259. (Currently amended) A process as set forth in claim 258, further comprising the act of:

communicating data link ~~output~~ image information over an RF data link in response to the ~~frame of spatially interpolated image~~ radar information.

260. (Currently amended) A process as set forth in claim 258, further comprising the acts of:

generating a data compressed frame of image information in response to the ~~frame of spatially interpolated image~~ radar information;

~~generating a frame of transformed image information in response to the data compressed frame of image information; and~~

~~generating the frame of prior pixel image information in response to the frame of transformed image information.~~

261. (Previously presented) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating subpixel vector change information having subpixel resolution in response to the prior pixel image information and in response to the next pixel image information; and

generating transformed image information in response to the prior pixel image information and in response to the next pixel image information.

262. (Previously presented) A process as set forth in claim 261, further comprising the act of:

communicating output image information over an RF data link in response to the transformed image information.

263. (Previously presented) A process as set forth in claim 261, further comprising the acts of:

generating data compressed image information in response to the transformed image information;

generating second transformed image information in response to the data compressed image information; and

generating the prior pixel image information in response to the second transformed image information.

264. (Currently amended) A process comprising the acts of:

~~storing a frame of prior pixel image information representing a prior image;~~

~~storing a frame of next pixel image information representing a next image; and~~

~~generating transformed image information in response to the frame of prior pixel image information and in response to the frame of next pixel image information~~ storing computer instructions;

generating radar image information; and

generating translated rotated image information in response to the radar image information and in response to the computer instructions.

265. (Currently amended) A process as set forth in claim 264, further comprising the acts of:

~~communicating output image information over an RF data link in response to the transformed image information~~ generating second radar image information; and

generating the translated rotated image information in response to the second radar image information and in response to the computer instructions.

266. (Currently amended) A system as set forth in claim ~~107,~~ 123, further comprising the acts of:

~~wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information~~ generating radar image information; and

generating the kernel filtered image information in response to the radar image information and in response to the computer instructions.

267. (Currently amended) A process comprising the acts of:

~~storing prior pixel image information representing a prior image;~~

~~storing next pixel image information representing a next image; and~~

~~generating transformed image information in response to the prior pixel image information and in response to the next pixel image information~~ storing computer instructions;

generating tomographic image information; and

generating translated rotated image information in response to the tomographic image information and in response to the computer instructions.

268. (Currently amended) A process as set forth in claim ~~267~~ 264, further comprising the acts of:

~~communicating output image information over an RF data link in response to the transformed image information~~ generating camera image information; and

generating the translated rotated image information in response to the camera image information and in response to the computer instructions.

269. (Currently amended) A process as set forth in claim ~~267~~ 264, further comprising the acts of:

~~generating data-compressed image information in response to the transformed image information;~~

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data-compressed image information;~~

~~generating second transformed image information in response to the scaled weighted image information;~~

~~generating spatially interpolated image information in response to the second transformed image information;~~

~~generating temporally-interpolated image information in response to the spatially-interpolated image information; and~~

~~generating the prior pixel image information in response to the temporally-interpolated image information~~ generating infra-red image information; and

generating the translated rotated image information in response to the infra-red image information and in response to the computer instructions.

270. (Previously presented) A process comprising the acts of:

storing pixel image information in a memory;

generating subpixel difference information having subpixel resolution by subtracting in response to the pixel image information and in response to feedback information;

generating transformed image information in response to the pixel image information;

generating weight information;

generating scale factor information;

generating scaled weighted image information in response to the transformed image information, in response to the scale factor information, and in response to the weight information; and

generating the feedback information in response to the scaled weighted image information.

271. (Previously presented) A process as set forth in claim 270, further comprising the act of:

communicating output image information over an RF data link in response to the scaled weighted image information.

272. (Currently amended) A process as set forth in claim 270, further comprising the acts of:

generating data compressed image information in response to the transformed image information;

generating the scaled weighted image information in response to the weight information, in

response to the scale factor information, and in response to the data compressed image information;

generating second transformed image information in response to the scaled weighted image information;

generating spatially interpolated image information in response to the second transformed image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the feedback information in response to the temporally interpolated image information.

273. (Currently amended) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information and in response to the next pixel image information;

generating transformed image information in response to the 64-pixel blocks of spatially interpolated image information, in response to the prior pixel image information, and in response to the next pixel image information;

generating weight information;

generating scale factor information;

writing weight input information into a memory in response to the weight information;

storing the weight input information in the memory; and

generating scaled weighted image information in response to the transformed image information, in response to the scale factor information, and in response to the weight input information stored in the memory.

274. (Currently amended) A process as set forth in claim 273, further comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating radar information; and

generating feedback information in response to the computer instructions and in response to the radar information;

generating artificial intelligence information in response to the computer instructions and in response to the radar information; and

generating overlaid graphics information in response to the computer instructions, in response to the radar information, and in response to the scaled weighted image information.

275. (Currently amended) A process as set forth in claim 273, further comprising the acts of:

generating data compressed image information in response to the scaled weighted image information;

generating second scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating second transformed image information in response to the scaled weighted image information;

generating 64-pixel blocks of second spatially interpolated image information in response to the second transformed image information;

generating 64-pixel blocks of temporally interpolated image information in response to the 64-pixel blocks of second spatially interpolated image information; and

generating the prior pixel image information in response to the 64-pixel blocks of temporally interpolated image information.

276. (Currently amended) A process comprising the acts of:

storing prior pixel image information;

storing next pixel image information;

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating radar information;

generating feedback information in response to the computer instructions and in response to the radar information;

generating rotated image information in response to the computer instructions and in response to the radar information;

generating overlaid graphics information in response to the computer instructions and in response to the radar information; and

generating temporally interpolated image information in response to between the prior pixel radar image information and the next pixel image information; and

generating transformed image information in response to the temporally interpolated image information, in response to the prior pixel image information in response to the overlaid graphics information,, and in response to the next pixel image information.

277. (Currently amended) A process as set forth in claim 276, further comprising the act of:

communicating data link output image information over an RF data link in response to the transformed temporally interpolated image information.

278. (Currently amended) A process as set forth in claim ~~276~~ 137, further comprising the acts of:

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the transformed image information;~~

~~generating second transformed image information in response to the scaled weighted image information;~~

~~generating spatially interpolated image information in response to the second transformed image information;~~

~~generating second temporally interpolated image information in response to the spatially interpolated image information; and~~

~~generating the prior pixel image information in response to the second temporally interpolated image information~~ generating second camera image information; and

generating the pattern recognition information in response to the second camera image information and in response to the computer instructions.

279. (Currently amended) A process comprising the acts of:

storing prior pixel image information representing a prior image;

storing next pixel image information representing a next image;

generating prior motion vector information in response to the prior pixel image information;

generating next motion vector information in response to the next pixel image information;

generating 64-pixel blocks of weighted ~~spatially interpolated~~ image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior motion vector information, and in response to the next motion vector information; and

generating transformed image information in response to the 64-pixel blocks of weighted ~~spatially interpolated~~ image information, in response to the prior pixel image information, and in response to the next pixel image information.

280. (Previously presented) A process as set forth in claim 279, further comprising the act of:

communicating output image information over an RF data link in response to the transformed image information.

281. (Currently amended) A process as set forth in claim 279, further comprising the acts of:

storing weight information;

storing scale factor information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the transformed image information;

generating second transformed image information in response to the scaled weighted image information;

generating ~~second~~ spatially interpolated image information in response to the second transformed image information;

generating temporally interpolated image information in response to the ~~second~~ spatially interpolated image information; and

generating the prior pixel image information in response to the temporally interpolated image information.

Claims 282 - 300 (Canceled)

301. (Currently amended) A ~~system as set forth in claim 98, further~~ process comprising the acts of: ~~a timeshared circuit including the spatial interpolation circuit, the subpixel vector change circuit, the transform processor, the weight circuit, the scale factor circuit, the weighting and scaling circuit, the resolution reduction circuit, and the display circuit; and~~

~~a shared memory including the first memory and the second memory~~ storing computer instructions;

generating sonar image information; and

generating translated rotated image information in response to the sonar image information and in response to the computer instructions.

Claims 302 - 379 (Canceled)

380. (Previously presented) A system comprising:

memory means for storing pixel image information;

means for generating weight information;

means for generating scale factor information; and

means for generating scaled weighted image information in response to the pixel image information stored in the memory means, in response to the scale factor information, and in response to the weight information.

381. (Currently amended) A system comprising:

        memory means for storing a prior 64-pixel block of image information;

        memory means for storing a next 64-pixel block of image information; and

        means for generating a plurality of temporally interpolated 64-pixel blocks of image information between the prior 64-pixel block of image information and the next 64-pixel block of image information; and

        ~~means for generating transformed image information in response to the plurality of temporally interpolated 64-pixel blocks of image information, in response to the prior 64-pixel block of image information, and in response to the next 64-pixel block of image information~~.

382. (Currently amended) A system comprising:

        memory means for storing ~~pixel~~ first image information;

        means for generating spatially interpolated image information in response to the ~~pixel~~ first image information stored in the memory means;

        means for generating subpixel difference image information having subpixel resolution by subtracting in response to the ~~pixel~~ first image information stored in the memory means and in response to feedback information;

        means for generating weight information;

        weight memory means;

        means for writing weight input information into the weight memory means in response to the weight information, the weight memory means storing the weight input information;

        means for generating weighted image information in response to the weight input information stored in the weight memory means and in response to the spatially interpolated image information; and

        means for generating the feedback information in response to the weighted image information.

383. (Previously presented) A system comprising:

        memory means for storing a prior 64-pixel block of image information;

        memory means for storing a next 64-pixel block of image information;

        means for generating a first temporally interpolated 64-pixel block of image information by temporally interpolating between the prior 64-pixel block of image information and the next 64-pixel block of image information;

        means for generating a second temporally interpolated 64-pixel block of image information by temporally interpolating between the prior 64-pixel block of image information and the next 64-pixel block of image information;

means for generating a third temporally interpolated 64-pixel block of image information by temporally interpolating between the prior 64-pixel block of image information and the next 64-pixel block of image information;

means for generating first transformed image information in response to the first temporally interpolated 64-pixel block of image information;

means for generating second transformed image information in response to the second temporally interpolated 64-pixel block of image information; and

means for generating third transformed image information in response to the third temporally interpolated 64-pixel block of image information.

Claim 384 (Canceled)

385. (Currently amended) A process comprising the acts of:

~~storing a prior 64-pixel block of image information representing a prior image;~~

~~storing a next 64-pixel block of image information representing a next image;~~

~~generating prior vector information in response to the prior 64-pixel block of image information;~~

~~generating next vector information in response to the next 64-pixel block of image information;~~

~~generating a temporally interpolated 64-pixel block of image information by temporally interpolating in response to the prior 64-pixel block of image information, in response to the next 64-pixel block of image information, in response to the prior vector information, and in response to the next vector information;~~

~~generating transformed image information in response to the temporally interpolated 64-pixel block of image information; and~~

~~generating reduced resolution image information in response to the transformed image information~~ storing computer instructions;

generating X-ray image information; and

generating translated rotated image information in response to the X-ray image information and in response to the computer instructions.

386. (Currently amended) A process as set forth in claim ~~385~~ 137, further comprising the acts of:

~~generating data compressed image information in response to the reduced resolution image information;~~

~~storing weight information;~~

~~storing scale factor information;~~

~~generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;~~

generating second transformed image information in response to the scaled-weighted image information; generating spatially interpolated image information in response to the second transformed image information; generating second temporally-interpolated image information in response to the spatially interpolated image information; and generating the prior 64-pixel block of image information in response to the second temporally interpolated image information generating infra-red image information; and

generating the pattern recognition information in response to the infra-red image information and in response to the computer instructions.

387. (Currently amended) A process as set forth in claim 385 137, further comprising the acts of making a data-compressed-database product in response to the reduced resolution image information :

generating radar image information; and

generating the pattern recognition information in response to the radar image information and in response to the computer instructions.

388. (Currently amended) A process as set forth in claim 385, further comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating camera information with a camera; and

generating feedback information in response to the computer instructions and in response to the camera information; generating subpixel image information in response to the computer instructions, in response to the camera information, and in response to the second temporally interpolated image information; and

generating rotated image information in response to the computer instructions and in response to the camera information.

389. (Previously presented) A process as set forth in claim 109,

wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and

wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information.

390. (Previously presented) A process comprising the acts of:

storing a frame of pixel image information in a memory;

generating spatially interpolated image information in response to the frame of pixel image information and in response to feedback information;

generating weight information;

generating scale factor information;

generating scaled weighted image information in response to the spatially interpolated image information, in response to the weight information, and in response to the scale factor information;

generating reduced resolution image information in response to the scaled weighted image information; and

generating the feedback information in response to the reduced resolution image information.

391. (Currently amended) A process as set forth in claim 390, further comprising the acts of:

generating data compressed image information in response to the reduced resolution image information;

generating the scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating transformed image information in response to the scaled weighted image information;

generating second spatially interpolated image information in response to the transformed image information;

generating temporally interpolated image information in response to the second spatially interpolated image information; and

generating the feedback information in response to the temporally interpolated image information.

392. (Currently amended) A process as set forth in claim 390, further comprising the act of making a building product in response to the process set forth in claim 390.

393. (Currently amended) A process as set forth in claim 390 159, further comprising the acts of:

making a display product; and

making a second product in response to the display product generating second camera image information; and

generating the artificial intelligence information in response to the second camera image information and in response to the computer instructions.

394. (Previously presented) A process as set forth in claim 390, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating the spatially interpolated image information in response to the frame of pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

395. (Previously presented) A process comprising the acts of:

storing a prior 64-pixel block of image information;

storing a next 64-pixel block of image information;

generating a first temporally interpolated 64-pixel block of image information between the prior 64-pixel block of image information and the next 64-pixel block of image information;

generating a second temporally interpolated 64-pixel block of image information between the prior 64-pixel block of image information and the next 64-pixel block of image information;

generating a third temporally interpolated 64-pixel block of image information between the prior 64-pixel block of image information and the next 64-pixel block of image information;

generating first reduced resolution image information in response to the first temporally interpolated 64-pixel block of image information;

generating second reduced resolution image information in response to the second temporally interpolated 64-pixel block of image information; and

generating third reduced resolution image information in response to the third temporally interpolated 64-pixel block of image information.

396. (Currently amended) A system as set forth in claim 121,

wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field

horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and

wherein the next ~~motion~~ vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information.

397. (Currently amended) A process as set forth in claim 395, further comprising the act of making a vehicle product <u>in response to the process</u>.

398. (Currently amended) A process ~~as set forth in claim 395, further~~ comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor;

generating feedback information in response to the computer instructions ~~and in response to the infra-red information~~; <u>and</u>

controlling a robot in response to the computer instructions and in response to the infra-red information~~; and~~

~~generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information~~.

399. (Currently amended) A ~~system~~ <u>process</u> as set forth in claim ~~123,~~ <u>159, further comprising the acts of:</u>

~~wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information~~ <u>generating infra-red image information; and</u>

<u>generating the artificial intelligence information in response to the infra-red image information and in response to the computer instructions.</u>

400. (Currently amended) A process as set forth in claim ~~109~~ <u>105</u>, further comprising the act of making a ~~communication~~ product in response to the ~~temporally interpolated image information~~ <u>process</u>.

401. (Currently amended) A process as set forth in claim ~~109~~ <u>159</u>, further comprising the acts of:

~~making a design product in response to the process set forth in claim 109; and~~

~~making a second product in response to the design product~~ <u>generating radar image information;</u> <u>and</u>

generating the artificial intelligence information in response to the radar image information and in response to the computer instructions.

402. (Currently amended) A ~~system~~ process as set forth in claim ~~137,~~ 197, further comprising the acts of: ~~wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and~~ ~~wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information~~ generating second camera image information; and

generating the graphic overlaid image information in response to the second camera image information and in response to the computer instructions.

403. (Currently amended) A process as set forth in claim 113, further comprising the act of making a ~~communicated~~ product in response to the process.

404. (Currently amended) A process as set forth in claim ~~113~~ 197, further comprising the acts of: ~~making a display product; and~~ ~~making a second product in response to the display product~~ generating infra-red image information; and

generating the graphic overlaid image information in response to the infra-red image information and in response to the computer instructions.

405. (Currently amended) A system as set forth in claim 141, wherein the prior ~~motion~~ vector information includes prior frame first field horizontal-axis ~~motion~~ vector information, prior frame first field vertical-axis ~~motion~~ vector information, prior frame second field horizontal-axis ~~motion~~ vector information, and prior frame second field vertical-axis ~~motion~~ vector information; and wherein the next ~~motion~~ vector information includes next frame first field horizontal-axis ~~motion~~ vector information, next frame first field vertical-axis ~~motion~~ vector information, next frame second field horizontal-axis ~~motion~~ vector information, and next frame second field vertical-axis ~~motion~~ vector information.

406. (Currently amended) A process as set forth in claim 115, further comprising the act of making a machined product in response to the process ~~set forth in claim 115~~.

407. (Previously presented) A process as set forth in claim 115, further comprising the acts of:
storing prior frame first field horizontal-axis motion vector information;
storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating the 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

408. (Currently amended) A process as set forth in claim ~~115~~ 197, further comprising the acts of:

~~making a display product in response to the 64-pixel blocks of spatially interpolated image information; and~~

~~making a second product in response to the display product~~ generating radar image information; and

generating the graphic overlaid image information in response to the radar image information and in response to the computer instructions.

409. (Currently amended) A process as set forth in claim ~~125~~ 106, further comprising the act of making a ~~database~~ product in response to the ~~transformed image information~~ process .

410. (Currently amended) A process as set forth in claim ~~125~~ 204, further comprising the acts of:

~~making a design product in response to the process set forth in claim 125; and~~

~~making a second product in response to the design product~~ generating second camera image information; and

generating the warped image information in response to the second camera image information and in response to the computer instructions.

411. (Previously presented) A process as set forth in claim 125, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the temporally interpolated image information in response to the spatially interpolated image information.

412. (Currently amended) A process as set forth in claim 127, further comprising the act of making a ~~filter~~ product in response to the process.

413. (Currently amended) A process as set forth in claim ~~127~~ 204, further comprising the acts of:

~~making a display product in response to the transformed image information; and~~

~~making a second product in response to the display product~~ generating infra-red image information; and

generating the warped image information in response to the infra-red image information and in response to the computer instructions.

414. (Previously presented) A process as set forth in claim 127, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information.

415. (Currently amended) A process as set forth in claim 143, further comprising the act of making a ~~graphic~~ product in response to the process ~~set forth in claim 143~~.

416. (Currently amended) A process as set forth in claim ~~143~~ 204, further comprising the acts of:
~~making a computer-aided-design product; and~~
~~making a second product in response to the computer-aided-design product~~ generating radar image information; and
generating the warped image information in response to the radar image information and in response to the computer instructions.

Claim 417 (Canceled)

418. (Currently amended) A process as set forth in claim ~~153~~ 533, further comprising the act~~s~~ of ~~making a data-compressed-database product in response to the scaled-weighted-image-information~~ :
generating radar image information; and
generating the zoomed image information in response to the radar image information and in response to the computer instructions.

419. (Currently amended) A process as set forth in claim ~~153~~ 143, further comprising the acts of:
~~making a design product in response to the process set forth in claim 153; and~~
~~making a second product in response to the design product~~ generating second infra-red image information; and
generating the pattern recognition information in response to the second infra-red image information and in response to the computer instructions.

420. (Currently amended) A process as set forth in claim ~~153~~ 143, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion-vector information;~~

~~storing prior frame first field vertical-axis motion-vector information;~~

~~storing prior frame second field horizontal-axis motion-vector information;~~

~~storing prior frame second field vertical-axis motion-vector information;~~

~~storing next frame first field horizontal-axis motion-vector information;~~

~~storing next frame first field vertical-axis motion-vector information;~~

~~storing next frame second field horizontal-axis motion-vector information;~~

~~storing next frame second field vertical-axis motion-vector information;~~

~~generating the spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion-vector information, in response to the prior frame first field vertical-axis motion-vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion-vector information, in response to the next frame first field horizontal-axis motion-vector information, in response to the next frame first field vertical-axis motion-vector information, in response to the next frame second field horizontal-axis motion-vector information, and in response to the next frame second field vertical-axis motion-vector information~~ generating radar image information; and

generating the pattern recognition information in response to the radar image information and in response to the computer instructions.

421. (Currently amended) A process as set forth in claim ~~157~~ 171, further comprising the act of ~~making a video product~~ operating a business in response to the process.

422. (Currently amended) A system ~~as set forth in claim 121, further~~ comprising:

a satellite navigator generating satellite navigation information;

a data link communicating data link information from a remote location;

a disk memory storing disk memory information; and

a display displaying an image ~~in response to the frame of temporally interpolated image information,~~ in response to the satellite navigation information, in response to the data link information, and in response to the disk memory information.

423. (Currently amended) A process as set forth in claim ~~157~~ 161, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion-vector information;~~

~~storing prior frame first field vertical-axis motion-vector information;~~

~~storing prior frame second field horizontal-axis motion-vector information;~~

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information generating second infra-red image information; and

generating the artificial intelligence information in response to the second infra-red image information and in response to the computer instructions.

424. (Currently amended) A process as set forth in claim 161, further comprising the act of making a location machined product in response to the process set forth in claim 161.

425. (Currently amended) A process as set forth in claim 161, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

~~generating the transformed image information in response to the spatially interpolated image information~~ generating camera image information; and

generating the artificial intelligence information in response to the camera image information and in response to the computer instructions.

426. (Currently amended) A process as set forth in claim ~~165~~ 195, further comprising the act of ~~making a designed product~~ generating artificial intelligence information in response to the scaled weighted image information.

427. (Currently amended) A process ~~as set forth in claim 252, further~~ comprising the acts of:

generating GPS navigation information;

communicating data link information from a remote location with a data link;

storing disk memory information in a disk memory; and

displaying an image ~~in response to the spatially interpolated image information,~~ in response to the GPS navigation information, in response to the data link information, and in response to the disk memory information.

428. (Currently amended) A process as set forth in claim ~~165~~ 163, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion-vector information;~~

~~storing prior frame first field vertical-axis motion-vector information;~~

~~storing prior frame second field horizontal-axis motion-vector information;~~

~~storing prior frame second field vertical-axis motion-vector information;~~

~~storing next frame first field horizontal-axis motion-vector information;~~

~~storing next frame first field vertical-axis motion-vector information;~~

~~storing next frame second field horizontal-axis motion-vector information;~~

~~storing next frame second field vertical-axis motion-vector information; and~~

~~generating the spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion-vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion-vector information, in response to the next frame first field horizontal-axis motion-vector information, in response to the next frame first field vertical-axis motion-vector information, in response to the next frame second field horizontal-axis motion-vector information, and in response to the next frame second field vertical-axis motion-vector information~~ generating camera image information; and

generating the artificial intelligence information in response to the camera image information and in response to the computer instructions.

429. (Currently amended) A process as set forth in claim 171, further comprising the act of making a ~~telephone~~ product <u>in response to the process</u>.

430. (Currently amended) A process as set forth in claim ~~258~~ <u>163</u>, further comprising the acts of:

~~generating input image information;~~

~~generating first data compressed image information by data compressing in response to the input image information;~~

~~storing second data compressed image information in a memory in response to the first data compressed image information;~~

~~generating data decompressed image information by data decompressing in response to second data compressed image information;~~

~~generating the frame of prior pixel image information in response to the data-decompressed image information;~~

~~generating the frame of next pixel image information in response to the data-decompressed image information; and~~

~~displaying an image in response to the frame of spatially interpolated image information~~ <u>generating infra-red image information; and</u>

<u>generating the artificial intelligence information in response to the infra-red image information and in response to the computer instructions.</u>

431. (Previously presented) A process as set forth in claim 171,

wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and

wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information.

432. (Currently amended) A process as set forth in claim 187, further comprising the act of making a ~~machine~~ <u>manufactured</u> product in response to the process set forth in claim 187.

433. (Previously presented) A process as set forth in claim 261, further comprising the acts of:

generating first data compressed image information by data compressing in response to the transformed image information;

generating communicated second data compressed image information with a data link in response to the first data compressed image information;

generating data decompressed image information by data decompressing in response to the communicated second data compressed image information; and

displaying an image in response to the data decompressed image information.

434. (Currently amended) A process as set forth in claim 187,

wherein the prior ~~motion~~ vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and

wherein the next ~~motion~~ vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information.

435. (Currently amended) A process as set forth in claim ~~190~~ 203, further comprising the act<u>s</u> of ~~making an oil product~~ :

generating second infra-red image information; and

generating the graphic overlaid image information in response to the second infra-red image information and in response to the computer instructions.

436. (Currently amended) A process as set forth in claim ~~255~~ 203, further comprising the acts of:

~~displaying a first perspective of an image in response to the 64-pixel blocks of spatially interpolated image information; and~~

~~displaying a second perspective of the image in response to the 64-pixel blocks of spatially interpolated image information, wherein the second perspective of the image is X-axis offset from the first perspective of the image~~ generating radar image information; and

generating the graphic overlaid image information in response to the radar image information and in response to the computer instructions.

437. (Currently amended) A process as set forth in claim ~~190~~ 171, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating the 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

438. (Currently amended) A process as set forth in claim ~~193~~ 203, further comprising the acts of ~~making an animation product~~ :

generating camera image information; and

generating the graphic overlaid image information in response to the camera image information and in response to the computer instructions.

439. (Previously presented) A process as set forth in claim 273, further comprising the acts of:

generating the scaled weighted image information as a first channel of scaled weighted image information representing a first perspective of an image in response to the transformed image information, in response to the scale factor information, and in response to the weight input information and as a second channel of scaled weighted image information representing a second perspective of the image in response to the transformed image information, in response to the scale factor information, and in response to the weight input information, wherein the second perspective of the image is horizontally offset from the first perspective of the image; and

generating multiplexed image information in response to the first channel of scaled weighted image information and in response to the second channel of scaled weighted image information.

440. (Currently amended) A system as set forth in claim ~~155,~~ 212, further comprising the acts of:

~~wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information~~ generating second infra-red image information; and

generating the warped image information in response to the second infra-red image information and in response to the computer instructions.

441. (Currently amended) A process as set forth in claim ~~198~~ 212, further comprising the act~~s~~ of ~~making an architectural product in response to the process set forth in claim 198~~ :

generating radar image information; and

generating the warped image information in response to the radar image information and in response to the computer instructions.

442. (Currently amended) A process as set forth in claim ~~198~~ 212, further comprising the acts of:

~~making a display product; and~~

~~making a second product in response to the display product~~ generating camera image information; and

generating the warped image information in response to the camera image information and in response to the computer instructions.

443. (Currently amended) A process as set forth in claim 190, further comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information;

generating ~~the~~ spatially interpolated image information in response to the computer instructions, in response to the ~~pixel image~~ radar information, in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information.

444. (Currently amended) A process as set forth in claim 201, further comprising the act of making ~~an entertainment~~ a product in response to the ~~weighted image information~~ process.

445. (Currently amended) A process as set forth in claim ~~204~~ 187, further comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information; and

generating the 64-pixel blocks of ~~spatially~~ temporally interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in

response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information.

446. (Currently amended) A process as set forth in claim 201, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating the 64-pixel blocks of spatially interpolated image information in response to the computer instructions, in response to the pixel translated image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information.

447. (Currently amended) A process as set forth in claim 204, further comprising the act of making an information a product in response to the process.

448. (Currently amended) A process as set forth in claim 204, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating ~~the~~ 64-pixel blocks of spatially interpolated image information ~~in response to the prior pixel image information, in response to the next pixel image information,~~ in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

449. (Currently amended) A process as set forth in claim 209, further comprising the act of making ~~an electronic~~ a product in response to the process ~~set forth in claim 209~~.

450. (Previously presented) A process as set forth in claim 209,

wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and

wherein the next motion vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information.

451. (Currently amended) A process as set forth in claim ~~212~~ 107, further comprising the act of making a ~~television~~ product in response to the ~~transformed image information~~ process.

452. (Previously presented) A process as set forth in claim 279, further comprising the acts of:

generating a first channel of output image information representing a first perspective of an image in response to the transformed image information; and

generating a second channel of output image information representing a second perspective of the image in response to the first channel of output image information, wherein the second perspective of the image is from a different horizontal displacement than the horizontal displacement of the first perspective of the image; and

generating multiplexed image information in response to the first channel of output image information and in response to the second channel of output image information.

453. (Currently amended) A process as set forth in claim ~~212,~~ 535, further comprising the acts of:

~~wherein the prior-motion-vector-information includes prior-frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and~~

~~wherein the next motion-vector-information includes next-frame horizontal-axis motion vector information and next frame vertical-axis motion vector information~~ generating second infra-red image information; and

generating the zoomed image information in response to the second infra-red image information and in response to the computer instructions.

454. (Currently amended) A process as set forth in claim ~~215~~ 108, further comprising the act of making a ~~telephone~~ product in response to the process.

455. (Currently amended) A process ~~as set forth in claim 215, further~~ comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information;

generating spatially interpolated image information ~~in response to the pixel image information,~~ in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information; and

generating ~~the~~ transformed image information in response to the spatially interpolated image information.

456. (Currently amended) A process as set forth in claim ~~215~~ 535, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion vector information;~~

~~storing prior frame first field vertical-axis motion vector information;~~

~~storing prior frame second field horizontal-axis motion vector information;~~

~~storing prior frame second field vertical-axis motion vector information;~~

~~storing next frame first field horizontal-axis motion vector information;~~

~~storing next frame first field vertical-axis motion vector information;~~

~~storing next frame second field horizontal-axis motion vector information;~~

~~storing next frame second field vertical-axis motion vector information;~~

~~generating spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion~~

~~vector information, in response to the prior frame second field vertical-axis motion-vector information, in response to the next frame first field horizontal-axis motion-vector information, in response to the next frame first field vertical-axis motion-vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion-vector information; and~~

~~generating the transformed image information in response to the spatially interpolated image information~~ generating radar image information; and

generating the zoomed image information in response to the radar image information and in response to the computer instructions.

457. (Currently amended) A process as set forth in claim ~~218~~ 120, further comprising the act of making a ~~data decompressed~~ product in response to the process ~~set forth in claim 218~~.

458. (Currently amended) A process as set forth in claim ~~218~~ 535, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion-vector information;~~

~~storing prior frame first field vertical-axis motion-vector information;~~

~~storing prior frame second field horizontal-axis motion vector information;~~

~~storing prior frame second field vertical-axis motion-vector information;~~

~~storing next frame first field horizontal-axis motion-vector information;~~

~~storing next frame first field vertical-axis motion-vector information;~~

~~storing next frame second field horizontal-axis motion-vector information;~~

~~storing next frame second field vertical-axis motion-vector information;~~

~~generating spatially interpolated image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion-vector information, in response to the prior frame first field vertical-axis motion-vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion-vector information, in response to the next frame first field horizontal-axis motion-vector information, in response to the next frame first field vertical-axis motion-vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion-vector information; and~~

~~generating the transformed image information in response to the spatially interpolated image information~~ generating camera image information; and

generating the zoomed image information in response to the camera image information and in response to the computer instructions.

459. (Currently amended) A process as set forth in claim 223, further comprising the act of ~~making a geophysical product~~ operating a business in response to the ~~transformed image information~~ process.

-A75-

460. (Previously presented) A process as set forth in claim 223, further comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information.

461. (Previously presented) A process as set forth in claim 223, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information.

462. (Currently amended) A process as set forth in claim 226, further comprising the act of making a ~~natural resource~~ product in response to the process.

463. (Currently amended) A process as set forth in claim ~~226~~ 107, further comprising the acts of:

~~storing prior frame horizontal-axis motion-vector information;~~

~~storing prior frame vertical-axis motion vector information;~~

~~storing next frame horizontal-axis motion-vector information;~~

~~storing next frame vertical-axis motion-vector information; and~~

~~generating the frame of spatially interpolated image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, in response to the prior frame horizontal-axis motion-vector information, in response to the prior frame vertical-axis motion-vector information, in response to the next frame horizontal-axis motion-vector information, and in response to the next frame vertical-axis motion-vector information~~ generating second radar image information; and

generating the temporally interpolated information in response to the second radar image information and in response to the computer instructions.

464. (Currently amended) A process as set forth in claim ~~226~~ 107, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion-vector information;~~

~~storing prior frame first field vertical-axis motion-vector information;~~

~~storing prior frame second field horizontal-axis motion-vector information;~~

~~storing prior frame second field vertical-axis motion-vector information;~~

~~storing next frame first field horizontal-axis motion-vector information;~~

~~storing next frame first field vertical-axis motion-vector information;~~

~~storing next frame second field horizontal-axis motion-vector information;~~

~~storing next frame second field vertical-axis motion-vector information;~~

~~generating the frame of spatially interpolated image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, in response to the prior frame first field horizontal-axis motion-vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion-vector information, in response to the prior frame second field vertical-axis motion-vector information, in response to the next frame first field horizontal-axis motion-vector information, in response to the next frame first field vertical-axis motion-vector information, in response to the next frame second field horizontal-axis motion-vector information, and in response to the next frame second field vertical-axis motion-vector information; and~~

~~generating the transformed image information in response to the spatially interpolated image information~~ generating camera image information; and

generating the temporally interpolated information in response to the camera image information and in response to the computer instructions.

465. (Currently amended) A process as set forth in claim 229, further comprising the act of making a ~~mineral~~ product in response to the process ~~set forth in claim 229~~.

466. (Currently amended) A process as set forth in claim ~~229~~ 107, further comprising the acts of:

~~making a display product; and~~

~~making a second product in response to the display product~~ generating infra-red image information; and

generating the temporally interpolated information in response to the infra-red image information and in response to the computer instructions.

467. (Currently amended) A process as set forth in claim ~~229~~ 124, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion vector information;~~

~~storing prior frame first field vertical-axis motion vector information;~~

~~storing prior frame second field horizontal-axis motion vector information;~~

~~storing prior frame second field vertical-axis motion vector information;~~

~~storing next frame first field horizontal-axis motion vector information;~~

~~storing next frame first field vertical-axis motion vector information;~~

~~storing next frame second field horizontal-axis motion vector information;~~

~~storing next frame second field vertical-axis motion vector information;~~

~~generating the 64-pixel blocks of spatially-interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information~~ generating second radar image information; and

generating the kernel filtered image information in response to the second radar image information and in response to the computer instructions.

468. (Currently amended) A process as set forth in claim ~~232~~ 124, further comprising the act_s_ of ~~making a processed product in response to the transformed image information~~ :

generating camera image information; and

generating the kernel filtered image information in response to the camera image information and in response to the computer instructions.

469. (Currently amended) A process as set forth in claim 232, further comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information; and

generating the 64-pixel blocks of ~~spatially-interpolated~~ image information in response to the pixel image information, in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information.

470. (Currently amended) A process as set forth in claim 232, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

generating the 64-pixel blocks of ~~spatially-interpolated~~ image information in response to the pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

471. (Currently amended) A process as set forth in claim 235, further comprising the act of making a ~~position~~ product <u>in response to the process</u>.

472. (Currently amended) A process ~~as set forth in claim 226, further~~ comprising the acts of:

generating a first channel of output image information representing a first perspective of an image ~~in response to the transformed image information~~;

generating a second channel of output image information representing a second perspective of the image in response to the transformed image information, wherein the second perspective of the image is from a different X-axis position than the X-axis position of the first perspective of the image; and

generating multiplexed image information in response to the first channel of output image information and in response to the second channel of output image information.

473. (Previously presented) A process as set forth in claim 235,

wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and

wherein the next motion vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information.

474. (Currently amended) A process as set forth in claim 238 455, further comprising the act of making a moving product in response to the process set forth in claim 238.

475. (Previously presented) A process as set forth in claim 238, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the frame of prior pixel image information, in response to the frame of next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the weighted image information in response to the spatially interpolated image information.

476. (Currently amended) A process as set forth in claim ~~241~~ 388, further comprising the act of making a ~~motion control~~ product in response to the ~~scaled weighted image information~~ process.

477. (Previously presented) A process as set forth in claim 241, further comprising the acts of:

storing prior frame horizontal-axis motion vector information;

storing prior frame vertical-axis motion vector information;

storing next frame horizontal-axis motion vector information;

storing next frame vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame horizontal-axis motion vector information, in response to the prior frame vertical-axis motion vector information, in response to the next frame horizontal-axis motion vector information, and in response to the next frame vertical-axis motion vector information; and

generating the scaled weighted image information in response to the spatially interpolated image information.

478. (Previously presented) A process as set forth in claim 241, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the scaled weighted image information in response to the spatially interpolated image information.

479. (Currently amended) A process as set forth in claim 244 232, further comprising the act of making a positioned product wherein at least one of the 64-pixel blocks of image information comprises 64-pixels of eight bits per pixel.

480. (Currently amended) A process as set forth in claim 244, further comprising the acts of:
    storing prior frame first field horizontal-axis motion vector information;
    storing prior frame first field vertical-axis motion vector information;
    storing prior frame second field horizontal-axis motion vector information;
    storing prior frame second field vertical-axis motion vector information;
    storing next frame first field horizontal-axis motion vector information;
    storing next frame first field vertical-axis motion vector information;
    storing next frame second field horizontal-axis motion vector information;
    storing next frame second field vertical-axis motion vector information;
    generating a spatially interpolated 64-pixel block of image information in response to the prior 64-pixel block of pixel image information, in response to the next 64-pixel block of pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and
    generating the temporally interpolated 64-pixel block of image information in response to the spatially interpolated 64-pixel block of spatially interpolated image information.

481. (Currently amended) A process as set forth in claim 249 539, further comprising the acts of making a position control product in response to the process set forth in claim 249 :
    generating second radar image information; and
    generating the zoomed image information in response to the second radar image information and in response to the computer instructions.

482. (Currently amended) A process as set forth in claim 249 539, further comprising the acts of:
    making a computer-aided-design product; and
    making a second product in response to the computer-aided-design product generating camera image information; and
    generating the zoomed image information in response to the camera image information and in response to the computer instructions.

483. (Currently amended) A process as set forth in claim ~~249,~~ 539, further comprising the acts of:

~~wherein the prior motion vector information includes prior frame first field horizontal-axis motion vector information, prior frame first field vertical-axis motion vector information, prior frame second field horizontal-axis motion vector information, and prior frame second field vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame first field horizontal-axis motion vector information, next frame first field vertical-axis motion vector information, next frame second field horizontal-axis motion vector information, and next frame second field vertical-axis motion vector information~~ generating infra-red image information; and

generating the zoomed image information in response to the infra-red image information and in response to the computer instructions.

484. (Currently amended) A process as set forth in claim ~~252~~ 485, further comprising the act of making a ~~signal~~ product in response to the ~~spatially interpolated image information~~ process.

485. (Currently amended) A process ~~as set forth in claim 252, further~~ comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information; and

~~generating the spatially interpolated~~ displaying an image ~~information in response to the prior pixel image information, in response to the next pixel image information,~~ in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information.

486. (Currently amended) A process as set forth in claim 255, further comprising the act of making a disk product in response to the process.

487. (Currently amended) A process as set forth in claim ~~255~~ 206, further comprising the acts of:

~~storing prior-frame horizontal-axis motion-vector information;~~

~~storing prior-frame vertical-axis motion-vector information;~~

~~storing next-frame horizontal-axis motion-vector information;~~

~~storing next-frame vertical-axis motion-vector information; and~~

~~generating the 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior-frame horizontal-axis motion-vector information, in response to the prior-frame vertical-axis motion-vector information, in response to the next-frame horizontal-axis motion-vector information, and in response to the next-frame vertical-axis motion-vector information~~ generating second radar image information; and

generating the graphic overlaid image information in response to the second radar image information and in response to the computer instructions.

488. (Currently amended) A process as set forth in claim ~~255~~ 206, further comprising the acts of:

~~storing prior-frame first-field horizontal-axis motion-vector information;~~

~~storing prior-frame first-field vertical-axis motion-vector information;~~

~~storing prior-frame second-field horizontal-axis motion-vector information;~~

~~storing prior-frame second-field vertical-axis motion-vector information;~~

~~storing next-frame first-field horizontal-axis motion-vector information;~~

~~storing next-frame first-field vertical-axis motion-vector information;~~

~~storing next-frame second-field horizontal-axis motion-vector information;~~

~~storing next-frame second-field vertical-axis motion-vector information; and~~

~~generating the 64-pixel blocks of spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior-frame first-field horizontal-axis motion-vector information, in response to the prior-frame first-field vertical-axis motion-vector information, in response to the prior-frame second-field horizontal-axis motion-vector information, in response to the prior-frame second-field vertical-axis motion-vector information, in response to the next-frame first-field horizontal-axis motion-vector information, in response to the next-frame first-field vertical-axis motion-vector information, in response to the next-frame second-field horizontal-axis motion-vector information, and in response to the next-frame second-field vertical-axis motion-vector information~~ generating camera image information; and

generating the graphic overlaid image information in response to the camera image information and in response to the computer instructions.

489. (Currently amended) A process as set forth in claim ~~258~~ 398, further comprising the act of making a ~~data-compressed~~ product in response to the process ~~set forth in claim 258~~.

-A84-

490. (Currently amended) A process as set forth in claim ~~258,~~ 206, further comprising the acts of:

~~wherein the prior motion vector information includes prior frame horizontal-axis motion vector information and prior frame vertical-axis motion vector information; and~~

~~wherein the next motion vector information includes next frame horizontal-axis motion vector information and next frame vertical-axis motion vector information~~ generating infra-red image information; and

generating the graphic overlaid image information in response to the infra-red image information and in response to the computer instructions..

491. (Currently amended) A process as set forth in claim ~~218~~ 533, further comprising the acts of:

~~storing prior frame first field horizontal-axis motion vector information;~~

~~storing prior frame first field vertical-axis motion vector information;~~

~~storing prior frame second field horizontal-axis motion vector information;~~

~~storing prior frame second field vertical-axis motion vector information;~~

~~storing next frame first field horizontal-axis motion vector information;~~

~~storing next frame first field vertical-axis motion vector information;~~

~~storing next frame second field horizontal-axis motion vector information;~~

~~storing next frame second field vertical-axis motion vector information;~~

~~generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and~~

~~generating the transformed image information in response to the spatially interpolated image information~~ generating second camera image information; and

generating the zoomed image information in response to the second camera image information and in response to the computer instructions.

492. (Currently amended) A process as set forth in claim 261, further comprising the act of ~~making an oil product~~ operating a business in response to the ~~transformed image information~~ process.

493. (Currently amended) A process as set forth in claim 232, further comprising the acts of:

generating data compressed image information in response to the ~~transformed~~ 64-pixel blocks of image information;

storing weight information;

storing scale factor information;

generating scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating ~~second~~ transformed image information in response to the scaled weighted image information;

generating ~~second~~ spatially interpolated image information in response to the ~~second~~ transformed image information;

generating temporally interpolated image information in response to the ~~second~~ spatially interpolated image information; and

generating the ~~feedback~~ pixel image information in response to the temporally interpolated image information.

494. (Previously presented) A process as set forth in claim 261, further comprising the acts of:

storing prior frame first field horizontal-axis motion vector information;

storing prior frame first field vertical-axis motion vector information;

storing prior frame second field horizontal-axis motion vector information;

storing prior frame second field vertical-axis motion vector information;

storing next frame first field horizontal-axis motion vector information;

storing next frame first field vertical-axis motion vector information;

storing next frame second field horizontal-axis motion vector information;

storing next frame second field vertical-axis motion vector information;

generating spatially interpolated image information in response to the prior pixel image information, in response to the next pixel image information, in response to the prior frame first field horizontal-axis motion vector information, in response to the prior frame first field vertical-axis motion vector information, in response to the prior frame second field horizontal-axis motion vector information, in response to the prior frame second field vertical-axis motion vector information, in response to the next frame first field horizontal-axis motion vector information, in response to the next frame first field vertical-axis motion vector information, in response to the next frame second field horizontal-axis motion vector information, and in response to the next frame second field vertical-axis motion vector information; and

generating the transformed image information in response to the spatially interpolated image information.

495. (Currently amended) A process as set forth in claim 264, further comprising the act of making a building product in response to the process.

496. (Previously presented) A process as set forth in claim 270, further comprising the acts of:

generating data compressed image information in response to the scaled weighted image information;

generating second scaled weighted image information in response to the weight information, in response to the scale factor information, and in response to the data compressed image information;

generating second transformed image information in response to the scaled weighted image information;

generating spatially interpolated image information in response to the second transformed image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the feedback information in response to the temporally interpolated image information.

497. (Previously presented) A process as set forth in claim 109, further comprising the acts of:

generating data compressed image information in response to the temporally interpolated image information;

generating spatially interpolated image information in response to the data compressed image information;

generating second temporally interpolated image information in response to the spatially interpolated image information; and

generating the prior 64-pixel block of image information in response to the second temporally interpolated image information.

498. (Currently amended) A process as set forth in claim 267, further comprising the act of making a vehicle product in response to the process ~~set forth in claim 267~~.

499. (Previously presented) A process as set forth in claim 115, further comprising the acts of:

generating data compressed 64-pixel blocks of image information in response to the 64-pixel blocks of spatially interpolated image information;

generating 64-pixel blocks of second spatially interpolated image information in response to the data compressed 64-pixel blocks of image information;

generating 64-pixel blocks of temporally interpolated image information in response to the 64-pixel blocks of second spatially interpolated image information; and

generating the prior pixel image information in response to the 64-pixel blocks of temporally interpolated image information.

500. (Currently amended) A process as set forth in claim 270, further comprising the act of making a manufactured product in response to the ~~sealed weighted image information~~ process.

501. (Currently amended) A process as set forth in claim 125, further comprising the acts of:

generating spatially interpolated image information in response to the ~~transformed~~ temporally interpolated image information;

generating second temporally interpolated image information in response to the spatially interpolated image information; and

generating the prior pixel image information in response to the second temporally interpolated image information.

502. (Previously presented) A process as set forth in claim 127, further comprising the acts of:

generating data compressed image information in response to the transformed image information;

generating spatially interpolated image information in response to the data compressed image information;

generating temporally interpolated image information in response to the spatially interpolated image information; and

generating the prior pixel image information in response to the temporally interpolated image information.

503. (Currently amended) A process as set forth in claim 273, ~~further comprising the act of making a communication product~~ wherein at least one of the 64-pixel blocks of spatially interpolated image information comprises 64-pixels of eight bits per pixel.

504. (Currently amended) A process as set forth in claim ~~273~~ 533, further comprising the acts of:

~~making a design product in response to the sealed weighted information; and~~

~~making a second product in response to the design product~~ generating infra-red image information; and

generating the zoomed image information in response to the infra-red image information and in response to the computer instructions.

505. (Currently amended) A process as set forth in claim 143, further comprising the acts of:

~~generating data compressed image information in response to the sealed weighted image information;~~

~~generating spatially interpolated image information in response to the data compressed image information;~~

~~generating temporally interpolated image information in response to the spatially interpolated image information; and~~

~~generating the prior pixel image information in response to the temporally interpolated image information~~ generating camera image information; and

generating the pattern recognition information in response to the camera image information and in response to the computer instructions.

506. (Currently amended) A process as set forth in claim 276, further comprising the act of making a ~~communicated~~ manufactured product in response to the process ~~set forth in claim 276~~.

507. (Currently amended) A process as set forth in claim ~~153~~ 163, further comprising the acts of:

~~generating transformed image information in response to the scaled weighted image information; and~~

~~generating the feedback image information in response to the transformed image information~~ generating second radar image information; and

generating the artificial intelligence information in response to the second radar image information and in response to the computer instructions.

508. (Currently amended) A process as set forth in claim 279, further comprising the act of making a machined product in response to the ~~transformed image information~~ process.

509. (Currently amended) A process as set forth in claim 161, further comprising the acts of:

~~generating data compressed image information in response to the scaled weighted image information;~~

~~generating second transformed image information in response to the data compressed image information; and~~

~~generating the feedback image information in response to the second transformed image information~~ generating radar image information; and

generating the artificial intelligence information in response to the radar image information and in response to the computer instructions.

510. (Currently amended) A process as set forth in claim ~~157~~ 195, further comprising the acts of:

generating second transformed image information in response to the scaled weighted image information; and

generating the ~~feedback~~ temporally interpolated image information in response to the second transformed image information.

511. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

generating first field vector information in response to the first field of image information;

generating second field vector information in response to the second field of image information;

generating a first field of temporally interpolated image information by temporally interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field vector information, and in response to the second field vector information; and

generating a second field of temporally interpolated image information by temporally interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field vector information, and in response to the second field vector information.

512. (Previously presented) A process as set forth in claim 511, comprising the act of:

generating multiplexed information by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of temporally interpolated image information, in response to the second field of temporally interpolated image information, in response to the first field vector information, and in response to the second field vector information.

513. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

storing first field subpixel vector information;

storing second field subpixel vector information;

generating a first field of spatially interpolated image information by spatially interpolating in response to the first field of image information and in response to the first field subpixel vector information; and

generating a second field of spatially interpolated image information by spatially interpolating in response to the second field of image information and in response to the second field subpixel vector information.

514. (Previously presented) A process as set forth in claim 513, comprising the act of:

    displaying an image in response to the first field of spatially interpolated image information and in response to the second field of spatially interpolated image information.

515. (Currently amended) A process comprising the acts of:

    ~~storing a first field of image information;~~

    ~~storing a second field of image information;~~

    storing computer instructions;

    generating inertial navigation information in response to the computer instructions;

    generating ~~television~~ video camera information with a ~~television~~ video camera; and

    ~~generating first field subpixel vector information in response to the first field of image information;~~

    ~~generating second field subpixel vector information in response to the second field of image information;~~

    ~~generating feedback information in response to the computer instructions, in response to the television camera information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information;~~

    ~~generating rotated image information in response to the computer instructions and in response to the television camera information;~~

    generating zoomed image information in response to the computer instructions and in response to the ~~television~~ video camera information~~;~~

    ~~generating a first field of scaled image information by scaling in response to the first field of image information and in response to the first field subpixel vector information; and~~

    ~~generating a second field of scaled image information by scaling in response to the second field of image information and in response to the second field subpixel vector information.~~

516. (Currently amended) A process as set forth in claim 515, underline further comprising the act of:

    generating ~~multiplexed~~ artificial intelligence information ~~by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of scaled image information,~~ in response to the ~~second field of scaled image~~ inertial navigation information, in response to the ~~first field subpixel vector~~ zoomed image information, and in response to the ~~second field subpixel vector information~~ computer instructions.

517. (Previously presented) A process comprising the acts of:

    storing a first field of image information;

    storing a second field of image information;

storing first field vector information;

storing second field vector information;

generating a first field of scaled image information by scaling in response to the first field of image information, in response to the second field of image information, in response to the first field vector information, and in response to the second field vector information; and

generating a second field of scaled image information by scaling in response to the first field of image information, in response to the second field of image information, in response to the first field vector information, and in response to the second field vector information.

518. (Previously presented) A process as set forth in claim 517, comprising the act of:

displaying an image in response to the first field of scaled image information and in response to the second field of scaled image information.

519. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

generating first field subpixel vector information in response to the first field of image information;

generating second field subpixel vector information in response to the second field of image information;

generating a first field of weighted image information by weighting in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information; and

generating a second field of weighted image information by weighting in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information.

520. (Previously presented) A process as set forth in claim 519, comprising the act of:

generating multiplexed information by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of weighted image information, in response to the second field of weighted image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information.

521. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

storing first field vector information;

storing second field vector information;

generating a first field of weighted image information by weighting in response to the first field of image information and in response to the first field vector information; and

generating a second field of weighted image information by weighting in response to the second field of image information and in response to the second field vector information.

522. (Previously presented) A process as set forth in claim 521, comprising the act of:

displaying an image in response to the first field of weighted image information and in response to the second field of weighted image information.

523. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

generating first field subpixel vector information in response to the first field of image information;

generating second field subpixel vector information in response to the second field of image information;

generating a first field of transformed image information by transforming in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information; and

generating a second field of transformed image information by transforming in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information.

524. (Previously presented) A process as set forth in claim 523, comprising the act of:

generating multiplexed information by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of transformed image information, in response to the second field of transformed image information, in response to the first field subpixel vector information, and in response to the second field subpixel vector information.

525. (Currently amended) A process comprising the acts of:

~~storing a first field of image information;~~

~~storing a second field of image information;~~

~~storing first field vector information;~~

storing second field vector information;

~~generating a first field of transformed image information by transforming in response to the first field of image information and in response to the first field vector information; and~~

~~generating a second field of transformed image information by transforming in response to the second field of image information and in response to the second field vector information~~ storing computer instructions;

generating television image information; and

generating translated rotated image information in response to the television image information and in response to the computer instructions.

526. (Currently amended) A process as set forth in claim 525, comprising the act of:

displaying an image in response to the ~~first field of transformed image information~~ computer instructions and in response to the ~~second field of transformed~~ translated rotated image information.

527. (Currently amended) A process comprising the acts of:

~~storing a first field of image information;~~

~~storing a second field of image information;~~

~~generating first field subpixel motion vector information in response to the first field of image information;~~

~~generating second field subpixel motion vector information in response to the second field of image information;~~

~~generating a first field of spatially interpolated image information by spatially interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information; and~~

~~generating a second field of spatially interpolated image information by spatially interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information~~ storing computer instructions;

generating navigation information; and

generating translated rotated image information in response to the navigation information and in response to the computer instructions.

528. (Currently amended) A process as set forth in claim 527, comprising the act of:

~~generating multiplexed information by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of spatially~~

~~interpolated image information, in response to the second field of spatially interpolated image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information~~ making a vehicle product in response to the process.

529. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

storing first field motion vector information;

storing second field motion vector information;

generating a first field of interpolated image information by interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information; and

generating a second field of interpolated image information by interpolating in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information.

530. (Previously presented) A process as set forth in claim 529, comprising the act of:

displaying an image in response to the first field of interpolated image information and in response to the second field of interpolated image information.

531. (Currently amended) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

generating first field subpixel motion vector information in response to the first field of image information;

generating second field subpixel motion vector information in response to the second field of image information;

generating a first field of scaled image information by scaling in response to the first field of image information [[,]] and in response to the first field subpixel motion vector information; and

generating a second field of scaled image information by scaling in response to the second field of image information [[,]] and in response to the second field subpixel motion vector information.

532. (Previously presented) A process as set forth in claim 531, comprising the act of:

generating multiplexed information by multiplexing in response to the first field of image information, in response to the second field of image information, in response to the first field of scaled image information, in response to the second field of scaled image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information.

533. (Currently amended) A process comprising the acts of:

~~storing a first field of image information;~~

~~storing a second field of image information;~~

~~storing first field motion vector information;~~

~~storing second field motion vector information;~~

~~generating a first field of scaled image information by scaling in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information; and~~

~~generating a second field of scaled image information by scaling in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information~~ storing computer instructions;

generating camera image information; and

generating zoomed image information in response to the camera image information and in response to the computer instructions.

534. (Currently amended) A process as set forth in claim 533, comprising the act of:

displaying an image in response to the ~~first field of scaled~~ zoomed image information ~~and in response to the second field of scaled image information~~.

535. (Currently amended) A process comprising the acts of:

~~storing a first field of image information;~~

~~storing a second field of image information;~~

~~generating first field motion vector information in response to the first field of image information;~~

~~generating second field motion vector information in response to the second field of image information;~~

~~generating a first field of weighted image information by weighting in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information; and~~

~~generating a second field of weighted image information by weighting in response to the first field of image information, in response to the second field of image information, in response to the first field motion vector information, and in response to the second field motion vector information~~ storing computer instructions;

generating infra-red image information; and

generating zoomed image information in response to the infra-red image information and in response to the computer instructions.

536. (Currently amended) A process ~~as set forth in claim 535,~~ comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating camera information with a camera; and

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating data compressed image information in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

537. (Currently amended) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

storing first field subpixel motion vector information;

storing second field subpixel motion vector information;

generating a first field of weighted image information by weighting in response to the first field of image information and in response to the first field subpixel motion vector information; and

generating a second field of weighted image information by weighting in response to the second field of image information [[,]] and in response to the second field subpixel motion vector information.

538. (Previously presented) A process as set forth in claim 537, comprising the act of:

displaying an image in response to the first field of weighted image information and in response to the second field of weighted image information.

539. (Currently amended) A process comprising the acts of:

~~storing a first field of image information;~~

~~storing a second field of image information;~~

~~generating first field motion vector information in response to the first field of image information;~~

~~generating second field motion vector information in response to the second field of image information;~~

~~generating a first field of transformed image information by transforming in response to the first field of image information, in response to the first field motion vector information; and~~

~~generating a second field of transformed image information by transforming in response to the second field of image information, and in response to the second field motion vector information~~ storing computer instructions;

generating radar image information; and

generating zoomed image information in response to the radar image information and in response to the computer instructions.

540. (Currently amended) A process as set forth in claim 539, comprising the act of:

generating ~~multiplexed~~ artificial intelligence information by multiplexing in response to the ~~first field of~~ zoomed image information, ~~in response to the second field of image information, in response to the first field of transformed image information, in response to the second field of transformed image information, in response to the first field motion vector information, and in response to the second field motion vector information~~ and in response to the computer instructions.

541. (Previously presented) A process comprising the acts of:

storing a first field of image information;

storing a second field of image information;

storing first field subpixel motion vector information;

storing second field subpixel motion vector information;

generating a first field of transformed image information by transforming in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information; and

generating a second field of transformed image information by transforming in response to the first field of image information, in response to the second field of image information, in response to the first field subpixel motion vector information, and in response to the second field subpixel motion vector information.

542. (Previously presented) A process as set forth in claim 541, comprising the act of:

displaying an image in response to the first field of transformed image information and in response to the second field of transformed image information.

543. (Currently amended) A process as set forth in claim ~~claims~~ 109, 115, 125, 127, 143, 153, 157, 161, 165, 171, 187, 533, 535, 537, 539, or 541, further comprising the acts of:

making a first product in response to the process; and

making a second product in response to the first product.

544. (Currently amended) A process as set forth in claim ~~claims~~ 190, 198, 201, 204, 209, ~~[212,]~~ 215, 218, 523, 525, 527, or 529, further comprising the acts of:

making a first product in response to the process; and

making a second product in response to the first product.

545. (Currently amended) A process as set forth in <u>claim</u> ~~claims~~ 223, 226, 232, 235, 238, 244, 249, 252, 255, 513, 515, 517, 519, or 521, further comprising the acts of:

        making a first product in response to the process;

        making a second product in response to the first product; and

        making a third product in response to the second product.

546. (Currently amended) A process as set forth in <u>claim</u> ~~claims~~ 258, 261, 267, 270, 273, 276, 385, 390, or 395, further comprising the acts of:

        making a first product <u>in response to the process</u>;

        making a second product in response to the first product; and

        making a third product in response to the second product.

547. (Currently amended) A process as set forth in <u>claim</u> ~~claims~~ 109, 113, 115, <u>126, 133, 145,</u> 153, 157, 161, 190, 193, 198, 212, 215, 218, 525, 527, 529, 537, 539, or 541, further comprising the act of making a product in response to the process.

548. (Currently amended) A process as set forth in <u>claim</u> ~~claims~~ <u>159, 167, 188, 195, 207, 211, 231,</u> 238, 241, 244, 258, 261, 264, 276, 279, 385, 513, 515, 517, 519, or 521, further comprising the act of making a product <u>in response to the process</u>.

549. (Currently amended) A process comprising the acts of:

        storing computer instructions;

        generating inertial navigation information in response to the computer instructions;

        generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

        ~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

        ~~generating overlaid graphics information in response to the computer instructions and in response to the television camera information; and~~

        ~~writing~~ <u>inputting</u> database information into a database memory in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information.

550. (Currently amended) A process comprising the acts of:

        storing computer instructions;

        generating inertial navigation information in response to the computer instructions;

generating ~~television~~ video camera information with a ~~television~~ video camera; and

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

generating rotated image information in response to the computer instructions and in response to the ~~television~~ video camera information; ~~and~~

~~writing database information into a database memory in response to the computer instructions and in response to the television camera information.~~

551. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating ~~television~~ video camera information with a ~~television~~ video camera; and

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

controlling a robot in response to the computer instructions and in response to the ~~television~~ video camera information; ~~and~~

~~writing database information into a database memory in response to the computer instructions and in response to the television camera information.~~

552. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating ~~television~~ video camera information with a ~~television~~ video camera;

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

generating artificial intelligence information in response to the computer instructions and in response to the ~~television~~ video camera information; and

~~writing~~ loading database information into a database memory in response to the computer instructions and in response to the ~~television~~ video camera information.

553. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating radar information;

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating pattern recognition information in response to the computer instructions and in response to the radar information; and

~~writing~~ inputting database information into a database memory in response to the computer instructions and in response to the radar information.

554. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating radar information;

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating data compressed image information in response to the computer instructions and in response to the radar information; and

~~writing~~ loading database information into a database memory in response to the computer instructions and in response to the radar information.

555. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating radar information;

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating spatially interpolated image information in response to the computer instructions and in response to the radar information; and

~~writing~~ inputting database information into a database memory in response to the computer instructions and in response to the radar information.

556. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating radar information; and

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating 64-pixel blocks of image information in response to the computer instructions and in response to the radar information; ~~and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the radar information.~~

557. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating radar information; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating zoomed image information in response to the computer instructions and in response to the radar information; ~~and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the radar information.~~

558. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating radar information;

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating translated image information in response to the computer instructions and in response to the radar information; and

generating overlaid graphics information in response to the computer instructions and in response to the radar information.

559. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating radar information; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

generating warped image information in response to the computer instructions and in response to the radar information; ~~and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the radar information.~~

560. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating radar information; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the radar information;~~

controlling a robot in response to the computer instructions and in response to the radar

information~~; and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the radar information.~~

561. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

generating pattern recognition information in response to the computer instructions and in

response to the ~~television~~ <u>video</u> camera information~~; and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the television camera information.~~

562. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

generating feedback information in response to the computer instructions and in response to the

~~television~~ <u>video</u> camera information~~;~~

~~generating subpixel image information in response to the computer instructions and in response to the television camera information; and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the television camera information.~~

-A103-

563. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating data compressed image information in response to the computer instructions and in response to the infra-red information; ~~and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the infra-red information.~~

564. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

~~generating spatially interpolated image information in response to the computer instructions and in response to the infra-red information; and~~

generating overlaid graphics information in response to the computer instructions and in response to the infra-red information.

565. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating temporally interpolated image information in response to the computer instructions and in response to the infra-red information; ~~and~~

~~generating overlaid graphics information in response to the computer instructions and in response to the infra-red information.~~

566. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

~~generating zoomed image information in response to the computer instructions and in response to the infra-red information; and~~

generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information.

567. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

~~generating translated image information in response to the computer instructions and in response to the infra-red information; and~~

generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information.

568. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating warped image information in response to the computer instructions and in response to the infra-red information;~~ and~~

~~generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information.~~

569. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; and

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating artificial intelligence information in response to the computer instructions and in response to the infra-red information; ~~and~~

~~generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information.~~

570. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating pattern recognition information in response to the computer instructions and in response to the infra-red information; ~~and~~

~~generating 64-pixel blocks of image information in response to the computer instructions and in response to the infra-red information.~~

571. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

~~generating subpixel image information in response to the computer instructions and in response to the television camera information; and~~

generating 64-pixel blocks of image information in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information.

572. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

~~generating spatially interpolated image information in response to the computer instructions and in response to the television camera information; and~~

generating 64-pixel blocks of image information in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information.

573. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating ~~television~~ <u>video</u> camera information with a ~~television~~ <u>video</u> camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the television camera information;~~

generating temporally interpolated image information in response to the computer instructions and in response to the ~~television~~ <u>video</u> camera information; ~~and~~

~~generating 64-pixel blocks of image information in response to the computer instructions and in response to the television camera information.~~

574. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating camera information with a camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

~~generating translated image information in response to the computer instructions and in response to the camera information; and~~

generating zoomed image information in response to the computer instructions and in response to the camera information.

575. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating camera information with a camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating warped image information in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

576. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating camera information with a camera;

generating feedback information in response to the computer instructions and in response to the camera information; <u>and</u>

controlling a robot in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

577. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating camera information with a camera; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating artificial intelligence information in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

578. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating camera information with a camera; <u>and</u>

generating feedback information in response to the computer instructions and in response to the camera information;

~~generating pattern recognition information in response to the computer instructions and in response to the camera information; and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

579. (Currently amended) A process comprising the acts of:

storing computer instructions;

~~generating inertial navigation information in response to the computer instructions;~~

generating camera information with a camera; and

generating feedback information in response to the computer instructions and in response to the camera information;

~~generating subpixel image information in response to the computer instructions and in response to the camera information; and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

580. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating navigation information in response to the computer instructions;

generating camera information with a camera; and

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating spatially interpolated image information in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

581. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating camera information with a camera; and

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating temporally interpolated image information in response to the computer instructions and in response to the camera information; ~~and~~

~~generating zoomed image information in response to the computer instructions and in response to the camera information.~~

582. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating GPS navigation information in response to the computer instructions;

generating camera information with a camera;

~~generating feedback information in response to the computer instructions and in response to the camera information;~~

generating pattern recognition information in response to the computer instructions and in response to the camera information; and

generating rotated image information in response to the computer instructions and in response to the camera information.

583. (Currently amended) A process comprising the acts of:

storing computer instructions;

generating inertial navigation information in response to the computer instructions;

generating infra-red information with an infra-red sensor; <u>and</u>

~~generating feedback information in response to the computer instructions and in response to the infra-red information;~~

generating data compressed image information in response to the computer instructions and in response to the infra-red information~~; and~~

~~generating rotated image information in response to the computer instructions and in response to the infra-red information.~~